

Ministry

**Building Code Commission** 

**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

#### BARRIER-FREE ACCESS EXITS

B.C.C. #88-23-234 14 December 1988

General Description of the Project

The project involves rebuilding portions of an existing building. Alterations are being performed to the interior and exterior to create 3 buildings for artists' and photographers' studios as well as for restaurant purposes. The dispute concerns barrier-free access and exit requirements.

### Reason for Application

Clause 3.7.2.1.(1)(a) of Ontario Building Code O. Reg. 419/86 states that a barrier-free access shall be provided on the entrance storey and on each storey served by a passenger type elevator or other platform equipped passenger elevating device described in Article 3.7.1.2. into each suite, except for suites of residential occupancy that are in storeys other than the entrance storey and that have all entrance doors at floor levels that do not correspond to the elevator stop Sentence 3.4.2.1.(1) states the provisions for the minimum number of exits required and Sentence 3.4.4.1.(1) states the provisions of required fire separation for exits.

# Applicant's Position

The entrances to approximately 20 two-storey studio suites are 2 to 4 feet above or below grade, and it is not feasible to provide ramps for barrier-free access into these suites. This condition is created by the level of the existing floor slabs. It is proposed to provide barrier-free access via access through adjoining suites.

An interconnected floor space, permitted by Sentence 3.2.8.1.(8), exists in each sprinklered two-storey studio suite. The building department requires (1) occupants of the second floor of each suite to exit through a fire separated stairway leading directly to the exterior and (2) each suite to have two means of egress because the floor area exceeds 200 m2.

Occupants of the second floor must pass by the permitted interconnected floor space to reach the stairway, and are thus exposed to any hazard on the ground floor. It is our contention that separation of the stair would not significantly increase the level of fire safety for these occupants.

### Building Official's Position

Clause 3.7.2.1.(1)(a) requires barrier-free access to be provided into each suite. All the suites in the building are new and must comply. A connecting door from one suite to another does not meet the requirement in Article 3.7.1.2. of providing barrier-free access for general use of the public or occupants of the building.

Sentence 3.4.2.1.(1) requires at least two exits from every floor area of a building. Access to each of the exits is required. "Floor area" is the area of the entire building. Where a floor area is divided into separate areas, each area has to have access to the required exits or have two exits itself.

Sentence 3.4.4.1.(1) states each exit is required to be separated from adjacent floor areas by a fire separation.

# Commission Ruling

In favour of the Applicant and Building Official. It is the decision of the Building Code Commission that Application #88-23-234 shall comply as follows:

- A. Exit stairs shall be fire separated at all levels and give direct access to the exterior.
- B. Barrier-free access shall be supplied to suites where (1) prevailing grades will allow and (2) floor area will permit.

- A. The Code is explicit in its requirements for exits.
- B. (1) Existing building and existing grades will allow the majority of the project to be a barrier-free design.
  - (2) To provide barrier-free access doors from front suites to the back suites would create additional life safety hazards.

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### EMERGENCY POWER SUPPLY

B.C.C #88-22-233 14 December 1988

### General Description of the Project

The project is a seven-storey residential building. The building was designed and a building permit was issued to construct the building without an emergency generator. The dispute involves whether an emergency power supply is required for fire fighters' elevators. The top storey is 19.8 m above grade.

### Reason for Application

Clause 3.2.6.11.(4)(a) of Ontario Building Code O. Reg. 583/83 states that an emergency power supply capable of operating a full load for at least 2 hours shall be provided by an emergency generator or by a separate service not supplied by the same substation as the primary source for every elevator in a building that is more than 36 m in height measured between grade and the floor level of the top storey and every fire fighter's elevator, assuming that only 1 elevator will operate at a time.

# Applicant's Position

Possible ambiguity in Code resulted in design of building without emergency power. During inspection of the building, the building department issued an "Order to Comply" that emergency power for the fire fighters' elevators is required.

The building is considered a highrise although it exceeds 18 m in height be only 1.8 m. If the building remained 7 storeys in height and the first 6 storeys reduced by .3 m each, the building would still have the same number of floors, the same number of elevator stops and the same occupant load but would not be considered a highrise. If not considered a highrise, the fire fighters' elevators would not be required and therefore no emergency generator would be required.

In favour of the Building Official. It is the decision of the Building Code Commission that Application #88-20-231 does not meet the requirements of Ontario Building Code O. Reg. 419/86. The present configuration of the building does not comply with the Code in that the unobstructed path of travel for the fire fighter from the vehicle to the entrance of the south portion of the building exceeds the prescribed distance.

### Recommendation

Taking into consideration that the Regulation prescribes a minimum level of safety, it is the Commission's strong recommendation that consideration be given to installing a sprinkler system in the south portion of the building.



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### NONCOMBUSTIBLE CONSTRUCTION

B.C.C. #88-21-232 30 November 1988

### General Description of the Project

The project is highrise apartment building of noncombustible construction. The dispute involves the installation of a  $12 \times 12 \times 9$  ft combustible structure located on the roof of the building.

### Reason for Application

Article 3.1.4.5. of Ontario Building Code O. Reg. 419/86 states the requirements for noncombustible construction in buildings.

### Applicant's Position

A transmitting/receiving shelter has been constructed with some combustible elements which appear to exceed the requirements of 3.1.4.5. Additional compensating safety features have been proposed which will obtain the technical requirements to sufficiently comply with the Code.

# Building Official's Position

Article 3.2.2.29. requires the building to be of noncombustible construction. Combustible elements that are not permitted by Article 3.1.4.5. have been used to build a transmitting/receiving shelter on the roof of the highrise apartment building.

### Commission Ruling

In favour of the Building Official. It is the decision of the Building Code Commission that Application #88-21-232 does not comply with Ontario Building Code O. Reg. 419/86.

- 1. The transmission facility contains combustible materials which are non-compliant with the Ontario Building Code.
- 2. The proposed fire separation does not meet the intent of the Ontario Building Code.

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### LOCATION OF ACCESS ROUTES

B.C.C. #88-20-231 30 November 1988

### General Description of the Project

The complex consists of six-storey and eight-storey residential towers connected by an underground parking garage. The dispute involves the fire department's access to the 8-storey south tower. The building is of noncombustible construction with two hour rated floor assemblies. It is equipped with a fire alarm and detection system as well as a standpipe and hose system.

### Reason for Application

Article 3.2.5.2. of Ontario Building Code O. Reg. 419/86 states the provisions for access routes required, location of access routes and design requirements for access routes. Sentences 3.2.2.4.(1) and (2) provide building requirements with respect to streets.

# Applicant's Position

The two towers are located over a common parking area and are considered to be one building. The Code requires the building to face one street and although the south tower does not face the street, its entrance is 54 m from the street which exceeds the 45 m distance.

The Building Department requires both towers to face a street (i.e. within 15 m of street) or sprinkler the south tower. Each requirement in Code is met except 45 m distance is slightly exceeded. Design measures that would clarify the issue would not improve fire department access or fire fighting capabilities.

# Building Official's Position

There is no direct access for fire fighting between the north and south towers of the building in every storey having its floor level less than 25 m above grade. The two towers are 17.5 m apart and the south tower has not been provided with either an appropriate fire access route or complete sprinkler protection.

In favour of the Building Official. It is the decision of the Building Code Commission that Application #88-20-231 does not meet the requirements of Ontario Building Code O. Reg. 419/86. The present configuration of the building does not comply with the Code in that the unobstructed path of travel for the fire fighter from the vehicle to the entrance of the south portion of the building exceeds the prescribed distance.

### Recommendation

Taking into consideration that the Regulation prescribes a minimum level of safety, it is the Commission's strong recommendation that consideration be given to installing a sprinkler system in the south portion of the building.



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### SMOKE VENTING / CROSS AISLES

B.C.C. #88-19-230 16 November 1988

### General Description of the Project

The project is a proposed renovation to a live theatre with performing stage. The dispute involves the method of smoke venting above the stage and the seating layout with respect to cross aisles.

### Reason for Application

Sentence 3.3.2.14.(6) of Ontario Building Code O. Reg. 419/86 states that at least 2 vents for the purpose of venting fire and smoke to the outside of a building shall be provided above every stage designed for theatrical performances and shall (a) have an aggregate area of at least 1/8 of the area of the stage behind the proscenium opening, and (b) be arranged to be opened automatically by means of (i) heatactuated devices, or (ii) actuation of the sprinkler system.

Sentence 3.3.2.4.(4) states that aisles shall terminate in a cross aisle, foyer or exit, and the width of such cross aisle, foyer or exit shall be at least the required width of the widest aisle plus 50% of the total required width of the remaining aisles that it serves.

### Applicant's Position

Smoke Venting: The Code requires heat activated gravity vents above the stage. It is proposed to install automatic mechanical smoke exhausts with emergency power.

Cross Aisles: The Code requires aisles to terminate in a cross aisle. The cross aisles do not extend through the centre seating section; however, the aisles extend to doors (except for 6 m dead end permitted) with the width based on occupant load and all rows having access to aisles.

# Building Official's Position

Smoke Venting: The proposal does not meet the standard of the OBC for fire venting. The mechanical systems are not satisfactory for fire venting due to lack of assurance they will work when exposed to fire.

Cross Aisles:

The proposed layout does not meet the criteria for cross aisles since the aisles do not connect across the theatre. There are two main aisles that dead end at the stage. The nature of the high occupant load in this theatre demands strict compliance with OBC.

### Commission Ruling

In favour of the Applicant and Building Official. It is the decision of the Building Code Commission that Application #88-19-230 regarding:

Smoke Venting: Mechanical ventilation has sufficiency of compliance provided that the fans are provided with emergency power and are actuated by the sprinkler system, a manual switch at the fire alarm annunciator panel and a fusible link;

Cross Aisles

and Dead Ends: Has sufficiency of compliance provided cross aisles are provided in the centre seating sections near Grid Line 3 (Exhibit 5, Dwg. A2) and connecting each end to the existing cross aisles and similarly near Grid Line 5 (Exhibit 7, Dwg. A5).

### Reasons

Smoke Venting: The failsafe devices would provide an acceptable alternative to gravity vents.

Cross Aisles

- and Dead Ends: (1) The proposed design does not meet the intent of the requirements for cross aisles as required by the Ontario Building Code.
  - (2) The increased aisle width in the balcony compensates for extending the dead end aisle to the extent indicated on Drawing A5 (Exhibit 7).



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EXITS

B.C.C. #88-18-229 16 November 1988

### General Description of the Project

The project is a proposed light industrial building composed of individual elevated cubes that are rotated and supported at one corner. The building is constructed of concrete floors and steel while the partitions in the cubes are of steel stud and drywall. The dispute involves the upper storeys contained within the individual cubes and the corridor providing access to the cubes. Each cube is an individual suite.

### Reason for Application

Sentence 3.4.1.1.(1) of Ontario Building Code O. Reg. 419/86 states that exit facilities complying with this Section shall be provided from every floor area which is intended for occupancy. Sentence 3.4.1.1.(2) states that where more than one exit is required from a floor area, each exit shall be separate from every other exit leading from that floor area. Sentence 3.4.4.1.(1) provides fire separation requirements for exits.

# Applicant's Position

It is proposed to divide the structure into two buildings by means of a horizontal "firewall" and provide exiting as if the cubes are two-storey structures at grade. The corridor providing access to the cubes connects two exit stairwells separated from the rest of the building by construction providing a 2 hour fire-resistance rating. To ensure a high level of life safety, the building will have full sprinkler protection and smoke detection in the cube units. Access to stairwells from levels below the cube will be through vestibules.

Although the Applicant considers the building to be three storeys, the Building Official considers the building to be five storeys and does not accept the concept of the horizontal firewall and considers the corridor which serves the cubes as a separate floor.

### Building Official's Position

The Applicant is proposing a five-storey building that has only one exit from its top two floors. The five storeys are (1) the ground floor; (2) the floor above the ground floor; (3) the corridor and electrical room level; (4) the triangular floor plates which represent the first floor level within the cube; and (5) the octagonal floor plate which represents the upper storey contained within the cube. The Ontario Building Code requires two independent exits from all levels.

### Commission Ruling

In favour of the Building Official. It is the decision of the Building Code Commission that Application #88-18-229 does not comply with the Ontario Building Code O. Reg. 419/86. The Applicant has stated that this building is classified as Group F, Division 3 for which the Code requires two exits from the floor areas; however, the Applicant proposes only one exit.

#### Reasons

The proposed design does not exhibit sufficiency of compliance with the Code.



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### COMBUSTIBLE FINISHES AND MILLWORK

B.C.C. #88-17-228 9 November 1988

### General Description of the Project

The project is a store located in a shopping mall. The dispute involves the use of combustible millwork (plywood) for show windows and finishing materials in the store.

### Reason for Application

Clause 3.1.4.5.(3)(a) of Ontario Building Code O. Reg. 419/86 states that combustible millwork, interior cladding and finishing materials shall be limited to millwork such as interior trim, doors and door frames, show windows together with their frames, aprons and backing, handrails, shelves, cabinets and counters.

### Applicant's Position

The Applicant is providing millwork such as interior trim, door frames and show window assemblies according to the limitations of Clause 3.1.4.5.(3)(a).

### Building Official's Position

The storefronts in question consist of door and show window assemblies extending from a bulkhead to the mall floor or alternately terminating at dwarf walls. The bulkheads consist of wood framing with plywood covering provided for the mounting of signage or for the attachment of finishes.

In noncombustible construction, Sentence 3.1.4.5.(2) allows for the use of certain minor combustible elements in wall construction such as 38 mm x 38 mm wood furring strips attached directly to or set into a continuous noncombustible backing for the attachment of interior finishes. Although Sentence 3.2.4.5.(3) makes provisions for the use of combustible finishes and millwork, the construction does not comply with the requirements of Article 3.1.4.5. in that the bulkheads are partitions and (a) are not constructed as 38 mm solid lumber partitions; (b) the wood framing used in the partition is not covered with gypsum board; and (c) the plywood is not backed by a noncombustible material such as gypsum board.

In favour of the Applicant. It is the decision of the Building Code Commission that Application #88-17-228 demonstrates sufficiency of compliance with the Ontario Building Code O. Reg. 419/86.

- 1. The building is one storey and fully sprinklered in accordance with Sentence 3.2.2.8.(1) of the Code, therefore requiring no fire rating for the roof.
- Combustible storefront elements and mirror backing become minor components of the building, and therefore may be permitted.



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### STANDPIPE AND HOSE SYSTEM

B.C.C. #88-16-227 9 November 1988

### General Description of the Project

The project is an addition to an existing one-storey industrial building which is a steel storage and warehouse plant. The dispute involves whether a standpipe and hose system is required since the total area of the Group F, Division 3 building now exceeds 3000 m<sup>2</sup>.

### Reason for Application

Subclause 3.2.5.4.(1)(a)(ii) of Ontario Building Code
O. Reg. 419/86 states that except as provided in Sentence
3.3.7.6.(7), a standpipe and hose system shall be provided in
every building greater in building area than that shown in
Table 3.2.5.A. for the applicable building height shown in
the Table where the building is not sprinklered and does not
exceed 14 m in building height measured between grade and the
ceiling of the top storey.

### Applicant's Position

The proposed addition of 1028 m<sup>2</sup> with 2918 m<sup>2</sup> of existing building used primarily for the storage and warehousing of steel bars (no wooden pallets are used) exceeds the allowable 3000 m<sup>2</sup>. Both the existing building and the addition are constructed of noncombustible elements - masonry, steel frame with steel roof joists and steel deck. The occupancy is a very low fire hazard with a total occupant load of approximately 10 persons. The premises are provided with adequate fire extinguishers and a safety committee meets once a month to ensure safety training of all employees.

# Building Official's Position

The Building Code requires a standpipe and hose system for Group F, Division 3 buildings of one storey building height having an building area exceeding 3000  $\text{m}^2$ . Since the total building area (including the addition) is 3946  $\text{m}^2$ , it does not comply with the Code.

In favour of the Applicant. It is the decision of the Building Code Commission that Application #88-16-227, in which the operation is a steel storage and warehouse plant, demonstrates a sufficiency of compliance with the Ontario Building Code O. Reg. 419/86 at this time.

- 1. The building itself is of noncombustible material.
- 2. The product to be warehoused is all metal and noncombustible.
- 3. A safety committee is in place and employees are trained in fire safety.
- 4. The premises are provided with adequate fire extinguishers.



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EXTERIOR EXIT PASSAGEWAYS

B.C.C. #88-15-226 8 September 1988

### General Description of the Project

The project is a twenty four-storey residential building with a roof amenities suite containing party room, swimming pool, exercise room, billiards room, etc. The dispute involves using the exterior roof as an exterior exit passageway to provide exit facilities for the roof amenities suite.

### Reason for Application

Article 3.4.1.2. of Ontario Building Code O. Reg. 419/86 provides the general requirements for types of exits from any floor area. Sentence 3.4.4.1.(8) states that the requirements in Sentences (1) to (5) do not apply to an exterior passageway provided (a) at least 50% of the exterior side is open to the outdoors, and (b) an exit stair is provided at each end of the passageway.

# Applicant's Position

The use of an exterior exit passageway is permitted by Article 3..4.1.2. The roof complies with the requirements of Sentence 3.4.4.1.(8) for exterior passageways since 50% of the passageway is open to the outdoors and since a rated exit stairwell is provided at each end of the passageway. Sentence 3.4.4.1.(8) does not limit the height at which an exterior exit passageway may be used.

# Building Official's Position

It is not the intent of the Code to use an exterior exit passageway as an exit from these amenities suites onto the roof. These amenities suites such as party room, swimming pool, etc. exit onto the roof of a building which may not be accessible at all times due to climatic conditions such as ice and snow. These amenities suites generate a high occupant load which would require proper exit facilities. The exit passageway cannot be considered and has to comply with all the requirements for exiting. The exit from the amenities suites is at the door leading into the exit stairwells on each side of the building and not the door leading onto the roof.

In favour of the Applicant. It is the decision of the Building Code Commission that Application #88-15-226 meets the requirements of the Ontario Building Code O. Reg. 419/86.

- 1. There are enclosed stairways at each end of the exterior passageway.
- Exit signs are installed at each exit both interior and exterior.
- 3. Automatic lighting will be provided on the exterior passageway controlled by an electric eye.
- 4. Emergency lighting has been provided.
- 5. Guard rails have been provided around the open sides of the passageway.
- 6. The exterior passageway will not be obstructed by tables, chairs, lounges, etc. and will be designated in such a way that the travel route is obvious.
- 7. There is heat tracing under the concrete pavers to prevent an accumulation of ice or snow.
- 8. Doors have been provided into the exit stairways to permit exiting directly from the enclosed portion of the amenity areas.



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#### EXTERIOR EXIT PASSAGEWAYS

B.C.C #88-14-225 8 September 1988

### General Description of the Project

The project is a two-storey office addition to an existing two-storey office/industrial building. The dispute involves the proposed second storey office exit which crosses the open ground floor roof to reach the new enclosed exit stair.

### Reason for Application

Article 3.4.1.2. of Ontario Building Code O. Reg. 419/86 provides the general requirements for types of exits from any floor area. Sentence 3.4.4.1.(8) states that the requirements in Sentences (1) to (5) do not apply to an exterior passageway provided (a) at least 50% of the exterior side is open to the outdoors, and (b) an exit stair is provided at each end of the passageway. Sentence 3.4.7.11.(1) states that access to exterior exit passageways from a floor area shall be through exit doors at the floor level.

# Applicant's Position

Interior office renovations to the second floor created the necessity for an additional exit to serve three tenants located centrally on the floor plan. This was achieved by providing an exterior passageway totally open to the outdoors across the ground floor roof to the newly constructed enclosed exit stair. To construct an enclosed passageway as requested by the Building Department would impose an additional snow load on the existing roof structure which could not be supported without extensive structural changes. The roof and ceiling assembly in question has a one hour rating.

# Building Official's Position

One of the required exits from the second floor area (public corridor) leads onto the roof. The tenants have to cross the roof in order to reach the exit stair on the other side. The exit does not meet the requirements for exterior exit passageway and may not be accessible at all times due to climatic conditions. The exit onto the roof cannot be considered as an exterior passageway since an exit stair at each end of the passageway has not been provided; therefore, it must comply with the requirements of 3.4.4.1.(1) to 3.4.4.1.(5).

In favour of the Applicant. It is the decision of the Building Code Commission that Application #88-14-225 indicates compliance with the Ontario Building Code O. Reg. 419/86.

- 1. Lighting is provided at each end of the exterior passageway and will be controlled by an automatic electric eye switch.
- 2. The door leading to the exit passageway is provided with panic hardware and will be equipped with hardware permitting the door to be opened from the exterior, thus there is a stair at each end of the passageway.
- 3. The Applicant advises that the open exterior passageway could be provided with heating cables to ensure that same will be kept free of snow an ice.



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### FOAMED PLASTIC INSULATION

B.C.C. #88-13-224 7 September 1988

### General Description of the Project

The building is a condominium with exterior walls of precast panel spandrels, insulation (rigid and fibreglass), metal studs and drywall application on interior of units. The dispute involves thermal barrier protection of the foamed plastic insulation.

### Reason for Application

Clause 3.1.4.5.(2)(f) of Ontario Building Code O. Reg. 419/86 provides the type of protection required for insulation and foamed plastics having a flame-spread rating of greater than 25 but not greater than 500 in noncombustible construction.

### Applicant's Position

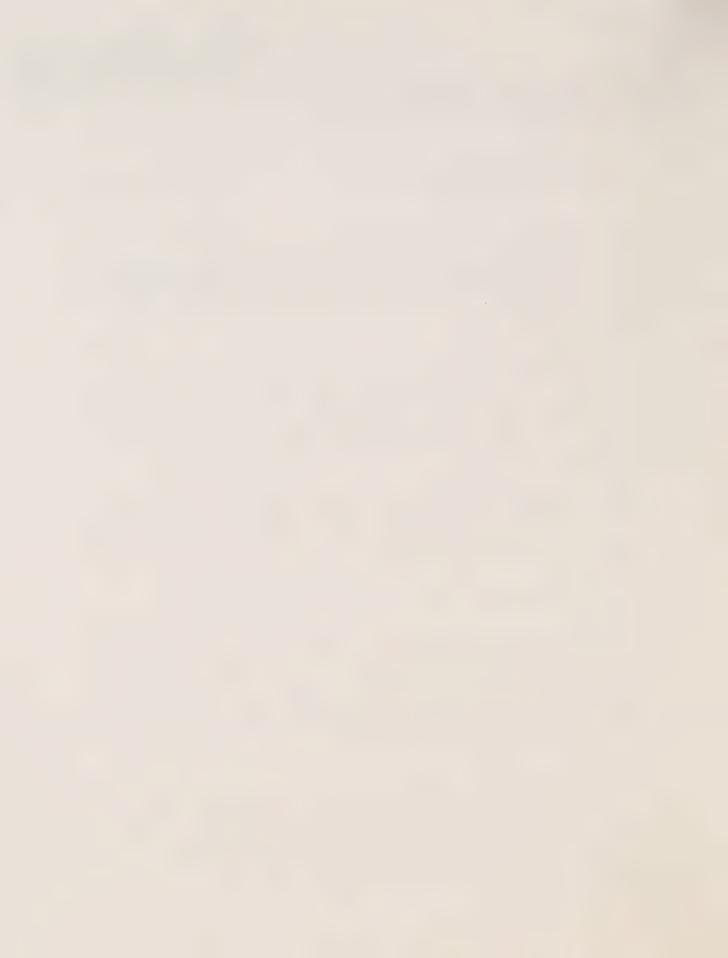
The Buildings Branch is reviewing the National Building Code's proposed change to the thermal barrier protection requirements from 2 layers of 15.9 mm Type "X" special fireresistant gypsum board to one layer. The 90 mm of fibreglass and 12.7 mm of gypsum board are equivalent to one layer of 15.9 mm Type "X" fire-resistant gypsum board.

# Building Official's Position

The Applicant has provided 90 mm fibreglass insulation plus 12.7 mm gypsum board finish as protection inside the room from the 25 mm rigid insulation. The Code requires at least 2 layers of 15.9 mm thick Type "X" special fire-resistant gypsum board, 75 mm of masonry or concrete, or any thermal barrier that when tested in conformance with Can 4 S1201 will not exceed average temperature rise of  $139^{\circ}$ C on the unexposed face of the thermal barrier after a period of 45 minutes.

### Commission Ruling

In favour of the Building Official. It is the decision of the Building Code Commission that Application #88-13-224 does not satisfy the requirements of the Ontario Building Code O. Reg. 419/86. However, the Building Code permits alternatives which may be accepted by the Chief Building Official.





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### SPATIAL SEPARATIONS & LIMITING DISTANCE

B.C.C. #88-12-223 7 September 1988

### General Description of the Project

The project consists of two proposed condominium buildings and a recreation centre to be built on a lot where parts of the land are owned by a parent company and other parts by its related companies. The recreation centre and one of the condominiums do not conform to the limiting distance requirements of the Ontario Building Code. It is proposed that since adjacent lands are owned by related corporations, an easement can be entered between the adjoining land owners.

### Reason for Application

Section 3.2.3. of Ontario Building Code O. Reg. 419/86 stipulates requirements for spatial separation and exposure protection of buildings.

# Applicant's Position

The entire property is treated as one site and the division of legal ownership has only been effected in order to permit separate financing and construction of the project in various phases. There is a problem with limiting distance between the north wall of the condominium and the northerly property boundary as well as between the north wall of the recreation centre and the northerly property boundary. Since the adjacent lands are owned by related corporations, it is proposed that an easement be entered between the adjoining land owners agreeing that notwithstanding the location of the boundaries between the parties, the Applicants shall be permitted to construct their buildings at the proposed locations, and the adjoining land owners agree not to build anything on their properties within a distance that equals the spatial separation required between buildings under the Ontario Building Code. This agreement would be binding upon the current owners, their successors and encumbrancers.

### Building Official's Position

Limiting distance is defined in the Ontario Building Code as "... the distance from an exposing building face to a property line ...". The proposed apartment building and recreation centre are in contravention of Subsection 3.2.3. since the areas of unprotected openings exceed that set forth in Table 3.2.3.A. based on limiting distances measured to the property lines. Acceptance of an agreement entered into between adjoining land owners for the purpose of spatial separation provisions of the Ontario Building Code is not within the jurisdiction of the Chief Building Official and it would appear to be contracting out of law.

### Commission Ruling

In favour of the Building Official. It is the decision of the Building Code Commission that Application #88-12-223 is no longer in dispute since the Applicant withdrew his application at the onset of the hearing.

- 1. Applicant indicates he is preparing alternate proposals that will satisfy the Ontario Building Code O. Reg. 419/86.
- 2. Applicant has agreed to confirm his withdrawal of this application to the Commission and to the Building Official.



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# BUILDING SIZE AND CONSTRUCTION RELATIVE TO OCCUPANCY

B.C.C. #88-11-222 6 September 1988

### General Description of the Project

The project is a ten-storey open-air parking structure. A permit was issued to carry out structural repairs to the parking structure. Steel plates were bolted to the underside of the floor slabs to supply tensile reinforcement and fireproofing was added to these plates to provide the required fire-resistance rating. The dispute involves whether the fireproofing can now be removed.

### Reason for Application

Clause 3.2.2.53.(2)(a) of Ontario Building Code O. Reg. 419/86 addresses noncombustible construction for Group F, Division 3 buildings of any height and any area. It states that floor assemblies shall be 2 h fire separations, except that such floor assemblies may be reduced to 1 h fire separations in a storage garage with all storeys constructed as open-air storeys.

### Applicant's Position

The Applicant desires to remove the fireproofing from the 9" by 1/2" steel plates which are bolted to the underside of the garage slabs. It is contended that the fireproofing retains moisture which in turn contributes to the corrosion of the steel.

# Building Official's Position

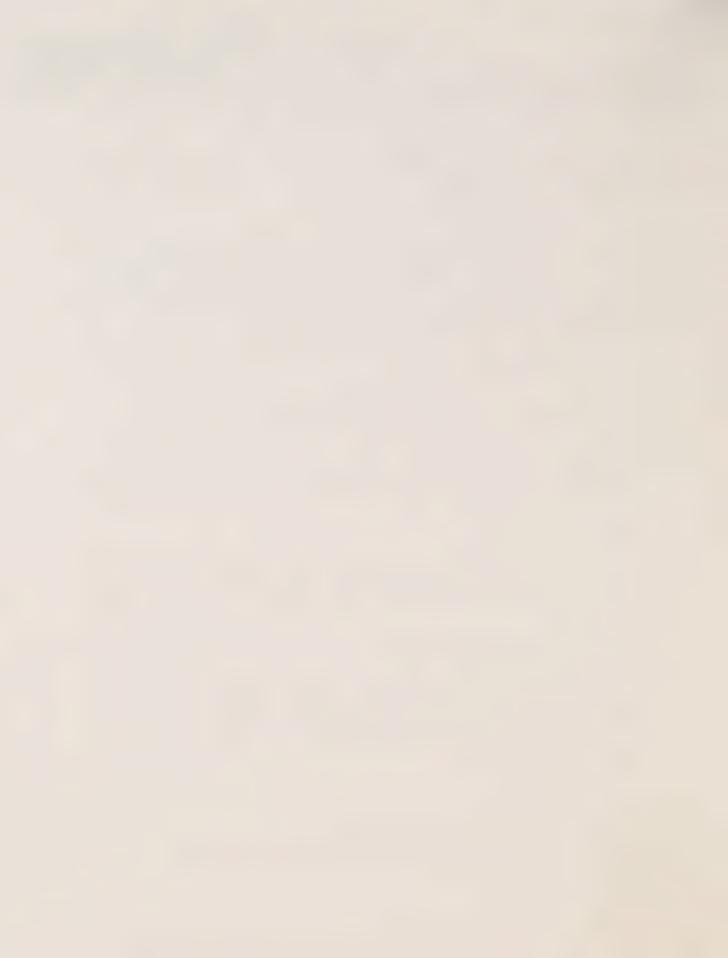
The structure does not fall within the scope of Article 3.2.2.51. which permits open-air storage garages up to 22 m in height to have floor, wall and roof assemblies constructed without a fire-resistance rating providing the conditions as set out in Clauses (a) to (d) are met. As such, the structure is required to be provided with a fire-resistance rating.

# Commission Ruling

In favour of the Building Official. It is the decision of the Building Code Commission that Application #88-11-222 does not meet the requirements of Ontario Building Code O. Reg. 419/86.

#### Reasons

The Code specifically requires a fire-resistance rating.



**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

#### **MEZZANINES**

B.C.C. #88-10-221 6 September 1988

### General Description of the Project

The project is a one-storey commercial building containing offices. The dispute involves whether the mezzanines in the building should be considered as an additional storey. If considered a two-storey building, extensive changes to the exiting provisions and fire separation are required. The original permit application drawings indicated a one-storey building with an enclosed mezzanine with an area of 5.9% of the building area. A revised application was made after issuance of foundation permit indicating an additional enclosed mezzanine and a third open mezzanine. Enclosed mezzanine aggregate total is 7.8% of building area. All mezzanine aggregate is 17.6% of building area.

### Reason for Application

Sentence 3.2.1.1.(3) of Ontario Building Code O. Reg. 419/86 states that except as provided in Sentences (4), (5) and (7), a mezzanine shall not be considered as a storey in calculating the building height provided (a) the aggregate area of the mezzanine floor does not exceed 40 per cent of the area of the room or storey in which it is located, (b) it is used as an open floor area except as provided in Sentence 3.3.2.12.(2), and (c) the space above the mezzanine floor has no visual obstructions more than 1070 mm above such floors.

Sentence 3.2.1.1.(4) states that except as provided in Sentence (5), a mezzanine shall not be required to be considered as a storey in calculating building height and need not conform to Sentence (3) where the aggregate area of the mezzanine floor does not exceed 10 per cent of the area of the storey in which it is located.

# Applicant's Position

The safety of the enclosed mezzanine is in no way compromised by the addition of an open mezzanine in another area of the building. If the building was as large as permissible under classification, all mezzanines would be less than 10% of building area. The allowable area has not been maximized. The Code does not sufficiently address multiple mezzanines or the combination of 10% mezzanines and 40% mezzanines. There is no middle ground in the "either/or" wording of the Code for mezzanines.

### Building Official's Position

Since the aggregate area of the mezzanine is 17.6% of the total building area and part of the mezzanine is enclosed, the mezzanine is to be considered a storey in calculating building height. Therefore, the building becomes two storeys.

The building does not comply to the requirements of a twostorey building with respect to fire separations and exits.

### Commission Ruling

In favour of the Applicant. It is the decision of the Building Code Commission that Application #88-10-221 is in accordance with Ontario Building Code O. Reg. 419/86 in as much as the aggregate area of the mezzanines does not exceed 40% of the floor area of the room or storey in which they are located. Furthermore, the aggregate areas of the enclosed portions of the mezzanines does not exceed 10% of the floor area of the room or storey in which the mezzanines are located. Therefore, these mezzanines shall not be considered as a storey in calculating building height.

#### Reasons

The original intent of the Code was to allow an aggregate area of mezzanines not to exceed 40% of the floor area of the room or storey in which they are located, regardless of whether the mezzanines are single, multiple, open, closed or a combination thereof. However, the enclosed portions shall not exceed 10% of the floor area of the room or storey in which they are located.



**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

# VENTILATION OF COMMERCIAL COOKING EQUIPMENT

B.C.C. #88-9-220 20 July 1988

### General Description of the Project

The project is a restaurant with a kitchen exhaust system existing on premises. The dispute involves compliance of the kitchen exhaust system with Code requirements.

### Reason for Application

Sentence 6.2.2.3.(4) of Ontario Building Code O. Reg. 419/86 states that systems for the ventilation of restaurant and other commercial cooking equipment shall be designed, constructed and installed to conform to NFPA 96, "Installation of Equipment and Removal of Smoke and Grease-Laden Vapours from Commercial Cooking Equipment", except as required by Sentence 3.5.3.1.(1) and Article 3.5.4.2.

### Applicant's Position

Respondent has served an "Order to Comply" pursuant to Section 8(2) of the Building Code Act, R.S.O. 1980 c. 51 citing a kitchen exhaust system as violating NFPA 96 and ordering correction within 14 days. The exhaust system in question has been part of the premises for four years, and has not been changed or modified in any way since that time.

The Applicant contends that this Order is not valid because Section 8(2) of the Act does not apply as there is no construction or demolition in progress. Alternatively, the respondents have not specified how the Building Code has been breached. The respondent had approved plans. The time for compliance is unreasonably short.

# Building Official's Position

The kitchen exhaust system was installed without a permit and does not comply with NFPA 96. The system is unsafe because the exhaust duct is of lighter gauge, not welded, and discharges into the ceiling space. The Order issued by the Inspector cites contravention of NFPA 96 which is referred to by Sentence 6.2.3.3.(4) of the Code as the authority having jurisdiction. The omission of quoting a specific Section of the Regulation does not invalidate the Order. Furthermore, 14 days time limit given to comply with the Order is not unreasonable as contended.

It is the decision of the Building Code Commission that Application #88-9-220 is terminated under Section 15(2) of the Building Code Act since an application has been made to the Supreme Court of Ontario which contains the subject of this appeal before the Building Code Commission.



**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

#### PUBLIC CORRIDORS

B.C.C. #88-8-219 20 July 1988

### General Description of the Project

The project is a proposed restaurant in an existing shopping centre. A portion of the underground parking level (Pl) below the restaurant is to be used as a food storage area and to locate washrooms. The dispute involves exits and access to exits from the underground storage area into the underground parking garage.

### Reason for Application

Sentence 3.3.1.3.(1) of Ontario Building Code O. Reg. 419/86 states that except as permitted in Sentences 3.3.4.3.(5) and (6), each suite in a floor area that contains more than one suite shall have an exterior exit doorway or a doorway into a public corridor or to an exterior passageway.

### Applicant's Position

The storage room was indicated as such on building permit set of drawings accepted by the municipality. By definition, the storage room to be occupied with a floor area of 882 ft<sup>2</sup> could be considered as a suite. By definition and intent of the Building Code, the underground garage would not be considered as a suite as it is a common area under one tenure and not individually leased.

It is contended that, since only one suite occupies the floor area, the area of the room is small and occupant load is low, (one or two people at any one time), it would appear that the intent of the Building Code with respect to the intended use of exiting requirements would be met.

# Building Official's Position

A storage room in the underground garage has been converted to a preparation area for a restaurant which is located on a different level. Also, in this storage room, an office and washrooms have been provided for the restaurant. Proper exits and access to exits have not been provided for this tenant. The means of egress for this suite leads through the underground garage. This does not comply with the Ontario Building Code.

In favour of the Applicant. It is the decision of the Building Code Commission that Application #88-8-219 will have a sufficiency of compliance with the Ontario Building Code O. Reg. 419/86 on condition that the letter from the Department of Public Health concerning storage room and washroom facilities on level Pl and the letter from the owner of the restaurant stating that this area will be used for storage only and not for food preparation, be provided to the Chief Building Official, the Chief of the Fire Department, the Department of Public Health and the Building Owner.

- 1. The storage room has direct access to a public corridor leading to an exit, and has access to exit through the parking level.
- 2. The building is completely sprinklered and protected by an approved fire alarm system.



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

#### NONCOMBUSTIBLE CONSTRUCTION

B.C.C. #88-7-218 15 June 1988

### General Description of the Project

The project is a five-storey hotel. The dispute involves the building's rooftop service room constructed of combustible elements.

### Reason for Application

Article 3.1.4.5. of Ontario Building Code O. Reg. 419/86 states the requirements for noncombustible construction in buildings.

### Applicant's Position

The rooftop service room is constructed of combustible construction and consists of a single, unoccupied room of  $16.35~\text{m}^2$  (176 ft²) located on the roof of a noncombustible, five-storey building. The combustible materials which form part of the construction of the rooftop service room will be protected by an interior cladding of 5/8" Firecode "C" gypsum board and will be separated from the remainder of the building; therefore, it will not constitute a hazard to the occupants of the building.

# Building Official's Position

Sentences 3.1.4.5.(2) to (12) list the combustible elements permitted in roofs, floors and walls. Exterior wood stud wall and wood ceiling joists are not included in these Sentences and therefore cannot be used in any area or portion of a building that is built of noncombustible construction.

# Commission Ruling

In favour of the Applicant. It is the decision of the Building Code Commission that Application #88-7-218 regarding the rooftop service room will provide sufficiency of compliance with Ontario Building Code O. Reg. 419/86 on condition that:

a) As the owner's agent proposed, interior walls and ceiling, separate from the existing framing, be constructed of steel studding to which appropriate drywall is attached to obtain one hour fire separation, or

b) The service room be sprinklered in accordance with the OBC and the interior side of the walls and ceiling are clad with 5/8" Firecode "C" gypsum board.

- 1. The service room contains a minimal fire load.
- 2. That the appliance installation requirements for clearances are maintained.
- 3. The service room is separated from the remainder of the building by 8" of concrete.
- 4. The service room is not intended for occupancy.



**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.
Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

#### FIRESTOPS IN CONCEALED SPACES

B.C.C. #88-6-217 15 June 1988

### General Description of the Project

The project is a proposed five-storey building for municipal offices. The dispute involves 1) requirements for firestopping at an exterior wall that uses a rain screen principle and 2) the use of a plywood nailing surface for a copper roof above a steel roof protected by drywall.

### Reason for Application

Clause 3.1.9.2.(1)(c) of Ontario Building Code O. Reg. 419/86 states that except as permitted in Sentence (2), firestops conforming to Article 3.1.9.4. shall be provided to block off concealed spaces within a wall assembly so that the maximum horizontal dimension does not exceed 20 m and the maximum vertical dimension does not exceed 3 m.

Clause 3.1.4.5.(2)(k) states that combustible elements of roofs, floors and walls shall be limited to combustible cant strips, roof curbs, nailing strips and similar components used in the installation of roofing.

### Applicant's Position

The exterior wall is continuous masonry with a cavity space for insulation and rain screen principle between wall and cladding.

To provide a nailing surface and solid walking surface to facilitate the installation of a copper roof, plywood is necessary. The Code permits combustible components in roofing; it also permits combustible insulation and combustible material above a metal roof deck where protected by drywall below.

# Building Official's Position

Firestopping provisions associated with the use of combustible insulation within a wall cavity required to be of noncombustible construction are intended not only to prevent floor to floor fire spread via concealed wall spaces but also to prevent unimpeded fire spread throughout the extent of the wall cavity.

The wall construction in question can be considered a masonry cavity wall and is penetrated by openings. The cavity has an air space and contains combustible insulation with a flame-spread rating greater than 25. The conditions set out in Sentence 3.1.9.2.(2) are not met and as such firestops conforming to Article 3.1.9.4. must be provided in accordance to Sentence 3.1.9.2.(1).

The roof construction in question incorporates plywood sheathing, built-up wood furring plywood sheathing supports, an air space for ventilation, combustible parapets supported on a steel deck and open web steel joist framing system. The combustible parapets are insulated wood frame structures covered with plywood sheathing and copper roofing and extend approximately 1 m above the finish roof surface. This construction does not meet the requirements or intent of the Code as the provisions contained in Subclauses (i) to (iv) have not been met.

# Commission Ruling

In favour of the Applicant. It is the decision of the Building Code Commission that Application #88-6-217 concerning

- A. requirements for firestopping and the air space between the block wall and exterior cladding of an exterior wall that uses the rain screen principle, and
- B. the use of a plywood nailing surface for copper roofing above a steel roof protected by drywall

provides a sufficiency of compliance with Ontario Building Code O. Reg. 419/86.

- A. (1) The exterior wall is an 8" block wall between concrete floors with a vapour barrier, 3" of rigid insulation, 30 mm of air space and a 4" stone facing.
- A. (2) The insulation of horizontal firestopping in the air space would defeat the purpose of the rain screen principle.
- B. Plywood installed above the drywall and rigid insulation provides the necessary solid backing for the soft copper sheathing and creates no additional fire hazard.

**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

## STANDPIPE AND HOSE SYSTEMS

B.C.C. #88-5-216 21 April 1988

## General Description of the Project

The project is an a proposed five-storey, 460 m<sup>2</sup> metalclad switchgear building. The dispute involves the requirement for a standpipe and hose system in a building that contains electrical equipment.

## Reason for Application

Clause 3.2.5.4.(1)(a) of Ontario Building Code O. Reg. 419/86 states that except as provided in Sentence 3.3.7.6.(7), a standpipe and hose system shall be installed in every building that is (i) more than 3 storeys in building height or more than 14 m in height measured between grade and the ceiling of the uppermost storey, or (ii) greater in building area than the area shown in Table 3.2.5.A. for the applicable building height shown in the Table where the building is not sprinklered and does not exceed 14 m in height measured between grade and the ceiling of the top storey.

# Applicant's Position

The building is unoccupied and has a monitored fire alarm and detection system. A hydrant is located within 90 m as per 3.2.5.3.(2) and an access route is provided that is acceptable to the city's fire department. The building is of noncombustible construction.

The concern regarding a water standpipe system in the building is that inappropriate use of water, accidentally or otherwise, could cause much greater damage to the building and electrical equipment, as well as power blackouts throughout much of the downtown area.

# Building Official's Position

The building is to be constructed to the immediate rear of an existing Hydro building. Fire department access will be provided to one face of the building via an on-site access route conforming to Article 3.2.5.2. Hydrants will be provided and located in accordance with Sentence 3.2.5.3.(2) and Clauses 3.2.5.2.(3)(b) and (c). Direct access for fire fighting into all storeys will be provided in accordance with Article 3.2.5.1.

The requirements of Clause 3.2.5.4.(1)(a) are clear. The building is more than 3 storeys in height and as such is required to be provided with a standpipe and hose system.

## Commission Ruling

In favour of the Applicant. It is the decision of the Building Code Commission that Application #88-5-216 has sufficiency of compliance providing that:

- a) a standpipe and hose system is installed with a siamese connection in lieu of city water, adequate signage on each fire hose cabinet and siamese, indicating that it is a dry system.
- b) that there is no regular occupant load within this building, and
- c) that standpipe and hose system is to O.B.C. standards, other than mentioned above.

#### Reasons

- 1. The building is unheated.
- 2. The nature of the building could be hazardous to life safety with a wet standpipe system.
- 3. The building is of noncombustible construction and there is minimal fire load within the structure.



**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

#### FIRE ALARMS

B.C.C. #88-4-215 21 April 1988

# General Description of the Project

The project consists of two six-storey office towers sitting on a single storey retail mall and two eight-storey highrise apartment towers, linked at their lowest levels by an enclosed walkway, with a proposed separate 1-storey recreational centre and multi-storey apartment tower all located on a common multi-level parking garage of which two of the three levels are below grade. Standpipe and hose coverage have been provided throughout the entire complex, with the exception of the apartment towers which are sprinklered. The dispute involves a single stage fire alarm system which is to be installed throughout the complex.

## Reason for Application

Sentence 3.2.4.4.(1) of Ontario Building Code O. Reg. 419/86 states that a single stage fire alarm system shall, upon the operation of any manually actuated signalling box or fire detector, cause an alarm signal to sound on all audible signal appliances in the system.

# Applicant's Position

The intent is to treat the recreation centre as a separate building and that as such, it will have the same sequence of operation as one of the condominiums. Although the proposal is in conflict with Subsection 3.2.4., earlier meetings with building department and fire department officials indicated support, preferring to have residential buildings on a single stage system to prevent confusion in the minds of the occupants between "alert" and "alarm". In addition, the fire department would not have to deal with the 600-odd residents evacuating their buildings during a fire which is only affecting one of the office towers 200 yards away.

# Building Official's Position

The designer proposes to limit the initiation and sounding of alarm signals to portions of the complex which are separated by horizontal fire separations comprised of reinforced concrete slabs with the requisite fire-resistance rating required for the size and occupancy of the particular portions of the complex. However, vertical communication systems and building services penetrate these horizontal fire separations.

This mode of operation is proposed to eliminate the unnecessary evacuation of portions of the complex, such as the apartment towers, when an imminent threat to life safety is not present, such as in one of the office towers. However, the requirements of Subsection 3.2.4. are clear. For the purposes of the aforementioned Subsection, the complex must be considered as one building. Accordingly, a single system must serve all occupancies and pursuant to Sentence 3.2.4.4.(1), an alarm signal must sound on all audible appliances in the system upon manual or automatic initiation of the single stage system.

## Commission Ruling

In favour of the Applicant. It is the decision of the Building Code Commission that Application #88-4-215 has sufficiency of compliance with Ontario Building Code O. Reg. 419/86 providing that:

- a) Separate buildings are:
- 1. The recreation building.
- 2. Condos 1 & 2 and PO garage
- 3. Office towers A & B, retail mall, and Pl & P2 garages.
- b) Single stage alarms shall be put in each of 1), 2) & 3) above and a central annunciator panel shall serve the entire complex.
- c) The minimum sequence of operation (5 paragraphs and letter) as in exhibit 7c.
- d) However, the recreational building has not been included in the aforementioned sequence of operation nor its interconnection with other buildings.
- e) Therefore, the entire sequence of operation and fire separations between the above buildings (1,2,3) and recreation building shall be reviewed and approved, signed and sealed by an independent qualified fire protection professional engineer and to the satisfaction of the building official.

#### Reasons

Because of the sheer size and complexity of the project and the omission of the recreation building from the sequence of operation, this hearing has decided that the above item (e) is required.



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

#### SPATIAL SEPARATION

B.C.C. #88-3-214 20 April 1988

# General Description of the Project

The project is a proposed five-storey residential/commercial building. The commercial portion of the property faces east. The dispute involves the storefronts facing east that have a limiting distance of 3 m which will restrict any unprotected openings to between 16% and 22% depending upon the divisions of the stores.

# Reason for Application

Table 3.2.3.A. of Ontario Building Code O. Reg. 419/86 provides maximum areas of unprotected openings and limiting distance between buildings. Table 3.2.3.A. requires that the unprotected openings not exceed 16% of the area of exposing building face on this elevation.

# Applicant's Position

The adjoining property on the east is a hydro power corridor 45.8 m in width which the Applicant had a lease arrangement with Hydro for use as parking. The Applicant wishes to construct fully unprotected openings for the storefront facing the Hydro land. The Applicant is willing to register on title that if a building is to be erected on the Hydro property in the future, the Owner or any future Owner would be required to alter the unprotected openings to suit the requirement of the Building Code of the time.

# Building Official's Position

- i) Limiting distance means, "The distance from an exposing building face to a property line...".
- ii) Since the property line is located 3 m from the exposing building face, the limiting distance is 3 m.

Lease arrangement with the adjacent land owner for use of the land for parking purposes cannot be use in calculating the area of unprotected openings using greater "limiting distances" since the Building Code does not permit it.

(Lease arrangement is for a term of five years commencing on the 1st day of September 1983 with the right to renew at its expiration for a further five-year term.)

## Commission Ruling

In favour of the Applicant. It is the decision of the Building Code Commission that Application #88-3-214 has a sufficiency of compliance on the condition that the owners of the two adjacent properties enter into a covenant which shall run with the title, stating that the parties will comply with the Building Code in force at the time of new construction on either property regarding the unprotected openings on the exposed east face of this building. This covenant shall be binding on both parties, heirs and successors or assigns.

#### Reasons

- 1. The Commission sees no life safety problems at this time. However, the above covenant shall provide for life safety protection in the future, should conditions change.
- 2. The Applicant agrees to provide a copy of the covenant to the Chief Building Official and to the Building Code Commission.
- 3. The Commission bases their decisions on the intent of the Ontario Building Code, O. Reg. 419/86, Sentence 3.2.3.1.(6).
- 4. The adjacent property is a Hydro corridor and has little likelihood of being built on.



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

#### MEANS OF EGRESS

B.C.C. #88-2-213 20 April 1988

## General Description of the Project

The project is a two-storey office building. The subject of dispute involves an open exit stairway that leads into the front entrance lobby where there is a reception/waiting area.

# Reason for Application

Article 9.9.2.4. of the Ontario Building Code O. Reg. 419/86 states that an exit shall be designed for no purpose other than for exiting except that an exit may also serve as an access to a floor area.

## Applicant's Position

The front entrance lobby contains an open stair used for the second means of exiting the second floor level. Article 9.9.2.4. of the O.B.C. prohibits the use of this area as a reception/waiting area. The building will contain a single tenant occupancy and will be equipped with a fire alarm system. The gross floor area of the two-storey building is 1040 m<sup>2</sup> and we feel that with the combination of low occupant load and small building size, adequate safety measures have been incorporated to allow the lobby to function as a reception/waiting area without compromising the safety intent of the Code.

# Building Official's Position

The Code does not permit the use of an exit as a reception and waiting area. The Code requires two exits from the second floor area, therefore this exit is required to be designed for no other purpose other than exiting.

## Commission Ruling

In favour of the Applicant. It is the decision of the Building Code Commission that Application #88-2-213 meets the intent of O. Reg. 419/86 because:

- a) The ground floor lobby provides suitable access to exit from the second floor.
- b) The ground floor and basement both meet the requirements for exits without the use of the aforementioned lobby.

## Reasons

- 1. The lobby is fire separated from the basement, ground floor and second floor.
- The building is only two storeys high with a low occupant load.



**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.
Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

### MEANS OF EGRESS

B.C.C. #88-1-212 20 April 1988

## General Description of the Project

The project is a two-storey office building. The subject of dispute involves an open exit stairway that leads into the front entrance lobby where there is a reception/waiting area.

## Reason for Application

Article 9.9.2.4. of Ontario Building Code O. Reg. 419/86 states that an exit shall be designed for no purpose other than for exiting except that an exit may also serve as an access to a floor area.

## Applicant's Position

The front entrance lobby contains an open stair used for the second means of exiting the second floor level. Article 9.9.2.4. of the OBC prohibits the use of this area as a reception/waiting area. The building will contain a single tenant occupancy and will be equipped with a fire alarm system. The gross floor area of the two-storey building is 1040 m² and with the combination of low occupant load and small building size, adequate safety measures have been incorporated to allow the lobby to function as a reception/waiting area without compromising the safety intent of the Code.

# Building Official's Position

The Code does not permit the use of an exit as a reception and waiting area. The Code requires two exits from the second floor area, therefore this exit is required to be designed for no other purpose other than exiting.

# Commission Ruling

In favour of the Applicant. It is the decision of the Building Code Commission that Application #88-1-212 meets the intent of Ontario Building Code O. Reg. 419/86 because:

- a) The ground floor lobby provides suitable access to exit from the second floor.
- b) The ground floor and basement both meet the requirements for exits without the use of the aforementioned lobby.

#### Reasons

- 1. The lobby is fire separated from the basement, ground floor and second floor.
- 2. The building is only two storeys high with a low occupant load.



**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

#### FIRE SEPARATIONS AND CLOSURES

B.C.C. #87-26-211 31 March 1988

## General Description of the Project

The project is a three-storey, one-tenant, office/commercial building with warehousing and repair facilities for optical products. The dispute involves whether the maximum area of wired glass in exit stair enclosures can exceed Code requirements if the wired glass is sprinklered.

## Reason for Application

Sentence 3.1.6.11.(2) of Ontario Building Code O. Reg. 419/86 states that except as provided in Sentence (3), the maximum area of wired glass in a door and the maximum area of wired glass panels or glass block in a door shall conform to Table 3.1.6.B. when used in the locations shown in the Table.

## Applicant's Position

It is proposed to install wired glass in two exit stair enclosures in excess of the maximum area permitted by Table 3.1.6.B. of the Ontario Building Code. The Applicant proposes to install water spray protection to reduce heat radiated from a fire into the exit to the level that would be permitted if the area of wired glass conformed to that required by Table 3.1.6.B.

# Building Official's Position

The proposed area of wired glass in the exit enclosures far exceed the allowable under Table 3.1.6.B. The Building Code does not have provisions that will allow acceptance for alternatives.

# Commission Ruling

In favour of the Building Official. It is the decision of the Building Code Commission that Application #87-26-211 does not meet the requirements of the Ontario Building Code O. Reg. 419/86.

#### Reasons

The proposed design does not meet the intent of the Code relative to life safety and no data was presented specific to the alternatives suggested.





**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

# TYPES OF EXIT FACILITY & BARRIER-FREE ACCESS

B.C.C. #87-25-210 31 March 1988

# General Description of the Project

The project is a proposed mosque. A permit has not been applied for and only preliminary discussions have taken place. The plans to the proposed religious building indicate non-compliance with the Ontario Building Code for interior stairs; exit doors and landings; and barrier-free access.

# Reason for Application

Article 3.4.7.3. of Ontario Building Code O. Reg. 419/86 requires every flight of interior stairs to have at least 3 risers. Sentence 3.4.7.12.(1) states that no exit door shall open immediately onto a flight of stairs, but shall open onto a landing at least 300 mm wider and longer than the width of such door. Sentence 3.4.7.12.(2) states that no riser of any flight of stairs shall be located within 300 mm of an exit door. Article 3.7.1.1. states compliance with barrier-free design for all buildings except as noted.

# Applicant's Position

Prayer hall is elevated one step for religious (symbolic) reasons. Landing becomes too wide and space is wasted from multipurpose room.

# Building Official's Position

The elevation difference between the prayer hall and the multipurpose room is considered a flight of interior stairs and must conform to Article 3.4.7.3. The doors between the prayer hall and multipurpose room are exit doors and must conform to Sentence 3.4.7.12.(1). Section 3.7 for barrier free access must be complied with.

## Commission Ruling

In favour of the Applicant. It is the decision of the Building Code Commission that Application #87-25-210 has sufficiency of compliance provided that:

- a) the door between the prayer hall and exit stair "C" is eliminated;
- b) the riser between vestibule "B" and stair "C" be eliminated so that the level of the multipurpose room and vestibule "B" and stair "C" are the same;
- c) at least one barrier free ramp shall be installed on the east wall of the multipurpose room to the landing or prayer hall;
- d) railings shall be installed on the landing between the double doors and at the opposite end of the landing from the barrier-free ramp. The railing shall extend from the edge of the landing riser back to the east wall of the multipurpose room;
- e) contrasting nosing on the riser shall be provided;
- f) contrasting carpeting between the level of the multipurpose room and the landing shall be provided;
- g) the door adjacent to the upper end of the barrier free ramp shall be fixed non-operable. The prayer hall side of this fixed non-operable door shall be finished so as not to appear as a door;
- h) drawings certified by the Chief Building Official for the above requirements shall be submitted to the Secretary of the Building Code Commission.

#### Reasons

If the above requirements are met, the life safety intent of the Code is accomplished.



**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

# NUMBER AND LOCATION OF EXITS FROM FLOOR AREAS

B.C.C. #87-24-209 28 March 1988

## General Description of the Project

The project is an addition of a two-storey building containing freezer and cooler compartments as well as an office area adjacent to the existing one-storey concrete and concrete block building. The dispute involves whether the freezer and cooler compartments require an exit door.

# Reason for Application

Sentence 3.4.2.1.(2) of Ontario Building Code O. Reg. 419/86 states that in buildings not exceeding two storeys in building height, a floor area may be served by one exit provided the floor area and travel distance requirements conform to Table 3.4.2.A. and the total occupant load served by the exit does not exceed 60.

# Applicant's Position

The freezer and cooler compartments are used to freeze prepared and packaged meats. Access to these areas are to maintain inventory and warehousing control and its occupancy is limited to one or two trained personnel at any one time. The requirement for an exit door in the cooler compartment is unnecessary and the removal of the exit will not prejudice life safety because 1) all equipment is electrically operated and there is no other combustible fuel in the area; 2) combustible materials are maintained at very cool temperatures and are less likely to be in a combustible situation.

# Building Official's Position

Exiting and access to exiting from the recent addition do not comply with the Ontario Building Code. If the exit door is blocked-up, then travel distance of 30 m to at least one exit will be exceeded by 15 m. Also access to exiting from the area will not be in compliance with Sentence 3.3.1.4.(1) of the Building Code since the floor area of 400 m<sup>2</sup> is twice the size of floor area required by Code for one access to exit.

## Commission Ruling

In favour of the Building Official. It is the decision of the Building Code Commission that Application #87-24-209 does not comply with the Ontario Building Code O. Reg. 419/86 if the present exit door is deleted.

#### Reasons

- 1. The travel distance to the nearest exit exceeds Building Code requirements if the existing door is deleted.
- 2. The floor area "access to exit" Building Code requirements are not met if the door is deleted.



**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

#### SPATIAL SEPARATION BETWEEN BUILDINGS

B.C.C. #87-23-208 28 March 1988

## General Description of the Project

The project is a two-storey residential building involving the extension of a first storey kitchen into an enclosed porch. The enclosed porch has an exposed building face less than 1.2 m from the lot line. The existing porch wall was a frame wall with substantial glazing and was replaced with an insulated brick veneer wall which reduced the unprotected openings of the existing wall by 90%. The dispute involves the unprotected openings that remain in the reconstructed wall.

# Reason for Application

Article 11.2.1.1. of Ontario Building Code O. Reg. 419/86 states that where an existing building is altered, the alteration shall provide a performance level that is at least equal to that prior to the alteration.

# Applicant's Position

Even though the brick veneer wall has an unprotected opening less than 1.2 m from the lot line, 90% of the glazing which was on the existing wall has been removed.

# Building Official's Position

The building permit was issued on the condition that there be no windows on the reconstructed wall located less than 1.2 m from the lot line. The construction was substantially complete prior to the issuance of a building permit. An unprotected opening was included in the reconstructed wall.

In as much as Subsection B22 of Part 11 specifically prohibits window in porches from being transferable, it is our opinion that Part 11 of the Building Code does not apply to removing the original kitchen wall and expanding the kitchen into an enclosed porch and rebuilding the porch wall as an exterior wall. The wall was not reconstructed for the purposes of an enclosed porch. Changing the rear porch area into part of the dwelling unit comprises an addition and not a renovation.

## Commission Ruling

In favour of the Applicant. It is the opinion of the Building Code Commission that Application #87-23-208 has sufficiency of compliance with Ontario Building Code O. Reg. 419/86.

### Reasons

- 1. The structure (porch) in question was in existence prior to the renovation.
- 2. The existence of this porch was granted to be part of the building by the Committee of Adjustment, dated November 17, 1987.
- 3. The Building Official reported to the Committee of Adjustment only relative to the Zoning By-Law and did not state that the proposed renovation violated the Building Code.
- 4. The Committee of Adjustment ruled that the renovation was minor in nature.
- 5. The amount of glazing was considerably reduced on the spatially separated side during the renovation, which conforms to Article 11.2.1.1.

**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

#88-6-113 AUTHORIZATION 7 December 1988 BY THE BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF the Applicant:

NSP Inc. P.O. Box 1800 Oakville, Ontario L6J 5C7

# ON THE SUBJECT OF:

"Bardeaubric, Bardatuil and Bardeaudal" this is an exterior wall covering to be used as siding, this system comprises of clay tile with integral hanging bracket and treated wood or galvanized iron purlins fastened to the wall framing members or existing masonry walls.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

- Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or 1. terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
- The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and 2. does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

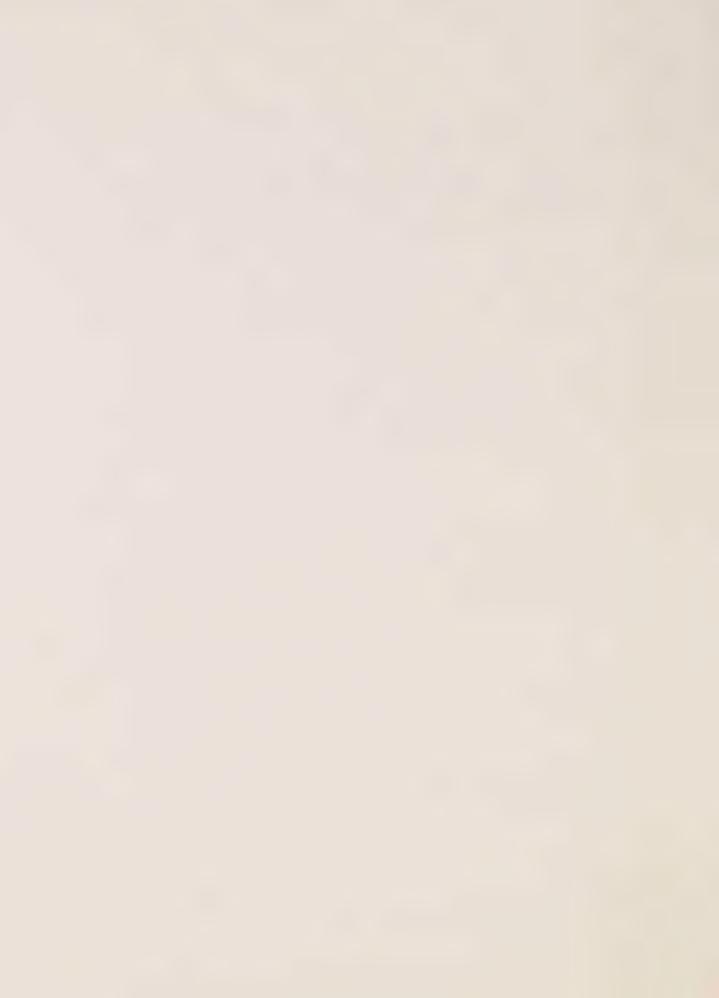
- 3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
- 4. Ihis AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
- 5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

# AND SPECIFIC REQUIREMENTS

- 6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, Ontario Regulation 419/86 as amended shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.
- 7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.
- 8. Each installation shall conform to the manufacturer's published installation instructions and shall be reviewed in detail, stamped, dated and signed for construction as specified by the manufacturer's listed trained personnel.
- 9. Attachment of this siding to the integral hanging bracket shall be as per manufacturer's published installation instructions using treated wood or galvanized iron purlins securely fastened to the wall framing members or existing masonry walls.

- 10. This siding system may be considered noncombustible when used with the galvanized iron purlins.
- 11. The supporting structures shall be adequate to support the expected loads as per the manufacturer's published installation instructions.

DATED at Toronto this 7th day in the month of December in the year 1988 for authorization #88-6-113 on behalf of:





**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

# AUTHORIZATION BY THE BUILDING MATERIALS EVALUATION COMMISSION

#88-5-112 7 December 1988

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Leber/Rubes Inc. 214 Merton St., Suite 104 Toronto, Ontario M4S 1A6

ON THE SUBJECT OF:

A window sprinkler assembly system to provide a two-hour fire resistance rated separation in a wall to consist of tempered or heat strengthened glass fixed in a non openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick response action.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

- 1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
- 2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
- 3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

- 4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
- 5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

# AND SPECIFIC REQUIREMENTS

- 6. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer (authorized in Ontario) and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).
- 7. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.
- 8. The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited model FR-1/Q-60, 12.7 mm (1/2 in.) orifice, 74°C (165°F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council Canada.
- 9. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness or extruded aluminum 1.8 mm (1/16 in.) minimum thickness. The maximum glazing shall be 2134 mm (7 ft. 0 in.) wide by 2844 mm (9 ft. 4 in.) high and minimum 6 mm (1/4 in.) thick.

- 10. 1. This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non openable window openings to a maximum of 2 hr. fire resistance rating provided,
  - (a) in an exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or
  - (b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.
- 11. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.
- 12. This window sprinkler system shall not be used in exits as defined in the Ontario Building Code.
- 13. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.
- 14. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunicator panel.
- Where the water supply is from a standpipe system conforming to the Code, the siamese connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".

A noncumbustible sign legibly printed in not less than 12.7 mm (1/2 in.) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

#### WARNING

SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

DATED at Toronto this 7 day in the month of DECEMBER in the year 1988 for authorization #88-5-112 amended on behalf of:

**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

AUTHORIZATION BY THE

#88-4-111 7 December 1988

BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF the Applicant:

Horton Automatics a part of the Dallas Corporation 4242 Baldwin Blvd. Corpus Christi, Texas 78405 U.S.A.

# Agent:

Horton Automatics P.O. Box 5221, Sta. "F" Ottawa, Ontario, Canada K2C 3H5

## ON THE SUBJECT OF:

Horton, Grand Revolver, these are electrically powered large diameter revolving doors with four hinged door leaves attached to the rotating centre core. Interior and exterior non-touching sensors provide rotation speeds and start/stop to suit the occupant of these revolving doors.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

- Where in the opinion of the COMMISSION negative experience 1. indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
- The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and 2. does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

- 2 -

- 3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
- 4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
- 5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

# AND SPECIFIC REQUIREMENTS

- 6. Except as authorized herein all applicable requirements of the Ontario Building Code Act and Ontario Regulation 419/86 shall be met. A copy of this Authorization shall be kept and maintained on the site of construction.
- 7. The electrically powered revolving doors shall be exempt from the code requirements of having hinged doors providing equivalent units of exit width located adjacent to them and may be used as an exit serving any and all floors, also the single leaves of this multiple leaf door may exceed the maximum width of the code.
- 8. The electrically powered revolving doors shall be considered to provide a minimum standard for clear passageway throughout each door leaf of at least;
  - (a) 550 mm (21.65 in.) for one unit of exit width,
  - (b) 850 mm (33.46 in.) for one and one half units of exit width,
  - (c) 1100 mm (43.30 in.) for two units of exit width, and
  - (d) the total units of exit width for each electrically powered revolving door is the accumulation of the exit widths on both sides of the centre core, provided that the aggregate door leaf widths do not exceed the narrowest throat (entrance) opening.

3/...

- 9. The four door leaves shall be operable to allow each door leaf to swing wide open when a force of not more than 90N (20 lb.) is applied to the centre of the door leaf in either direction of egress travel. There shall not be any latching or locking devices installed to impede or prevent exiting, however entrance may be permitted through the use of a key or access card and an emergency release mechanism shall be installed.
- 10. A legible sign having the words PUSH FOR EMERGENCY EXIT shall be permanently mounted mid-high on each side of the door leaf, the lettering on the sign shall be at least 25 mm (1 in.) high with a 5 mm (1/4 in.) stroke.
- 11. Each door leaf shall be so equipped with non-touching sensors to shut off the electrical supply to the revolving core to:
  - (a) fail safe should a person stop or fall inside the entrance, or encounter any obstacle by the door leaf, and
  - (b) each door leaf shall be capable of folding open in the forward or backward direction.
- 12. The maximum rotation speeds of the leading edge of the door leaf for normal use shall be 250 feet per minute and for the handicap use shall be 125 feet per minute. Both rotational speeds shall be adjustable to suit the particular needs of the installation.
- 13. A push button with a handicap symbol shall be installed at or near the interior and the exterior of the building for each electrically powered revolving door to reduce the core speed by at least one-half the normal speed for at least one revolution.
- All glass used in each door leaf and the enclosure walls shall comply with the building code for exits and conform to CAN2-12.1, "Glass, Safety, Tempered or Laminated" or to CAN2-12.11, "Glass, Wired, Safety".
- 15. Specially trained installers shall install, trial run, instruct and supply the user on operation, maintenance and trouble shooting functions of the unit.

DATED at Toronto this 7 day in the month of December in the year 1988 for authorization #88-4-111 on behalf of:





**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

# AUTHORIZATION BY THE BUILDING MATERIALS EVALUATION COMMISSION

#88-3-110 7 December 1988

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Valco London Industries Inc. 231 Exeter Road London, Ontario N6L 1A4

ON THE SUBJECT OF:

Outdoor combustion air supply channel with solid welded seams built within the fire chamber of a fireplace steel liner.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

- 1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
- 2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
- 3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

- 4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
- 5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

# AND SPECIFIC REQUIREMENTS

- 6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, Ontario Regulation 419/86 as amended shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.
- 7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.
- 8. (a) The subject matter shall be exempt from the Code requirement for combustion air "where it is placed inside the fire chamber, be located at the front centre of the fire chamber hearth and be equipped with a noncombustible hood"; whereas
  - (b) the subject matter may be placed inside the fire chamber, be located at the front on both sides of the fire chamber and be equipped with noncombustible dampers on both openings without a hood.
- 9. Since at the present time there are no available "Standards" for a fireplace liner with "integral combustion air supply"; this AUTHORIZATION determined that the subject matter did satisfy appropriate requirements. However, when the appropriate "Standards" are included in the code, the applicant shall retest to those "Standards", at which time this AUTHORIZATION shall be required to be amended.

- 10. Installation instructions shall be provided by the manufacturer:
  - (a) Instructions shall be illustrated and shall include directions and information adequate for attaining proper and safe installation of the fireplace liner assembly, chimney, combustion air duct and dampers;
  - (b) A caution shall be provided for the combustion air of fireplace operation and the possible consequences of starving other fuel burning appliances of combustion, ventilation and dilution air as a result of fireplace operation.
- 11. The following information shall be incorporated on a metal plate fastened to the major segment of the assembly and visible after installation to provide a permanent marking:
  - (a) The manufacturer's identification and part designation;
  - (b) A statement requiring that the manufacturer's installation instructions and applicable codes are to be followed;
  - (c) A caution regarding the need for combustion air for fireplace operation and the possible consequences of restricting such air supply.

## LIMITATIONS

12. Subject to the above paragraph 1, this authorization shall be further limited for use in buildings for which a permit is applied for prior to 31 December 1990; however, the applicant may by written registered letter to this Commission request an amendment to this paragraph 10 at least three months before that date.

DATED at Toronto this 7<sup>k</sup> day in the month of DECEMBER in the year 1788 for authorization #88-3-110 amended on behalf of:





**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

# AUTHORIZATION BY THE BUILDING MATERIALS EVALUATION COMMISSION

#88-2-109 7 December 1988

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act,
Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Randal Brown & Associates Limited 6 Lansing Square, Suite 105 Willowdale, Ontario M9Z 1T5

ON THE SUBJECT OF:

A window sprinkler assembly system to provide a two-hour fire resistance rated separation in a wall to consist of tempered or heat strengthened glass fixed in a non openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick response action.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

- 1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
- 2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
- 3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

- 4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
- 5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

# AND SPECIFIC REQUIREMENTS

- 6. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer (authorized in Ontario) and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).
- 7. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.
- 8. The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited model FR-1/Q-60, 12.7 mm (1/2 in.) orifice, 74°C (165°F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council Canada.
- 9. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness or extruded aluminum 1.8 mm (1/16 in.) minimum thickness. The maximum glazing shall be 2134 mm (7 ft. 0 in.) wide by 2844 mm (9 ft. 4 in.) high and minimum 6 mm (1/4 in.) thick.

- 10. 1. This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non openable window openings to a maximum of 2 hr. fire resistance rating provided,
  - (a) in an exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or
  - (b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.
- 11. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.
- 12. This window sprinkler system shall not be used in exits as defined in the Ontario Building Code.
- 13. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.
- 14. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunicator panel.
- 15. Where the water supply is from a standpipe system conforming to the Code, the siamese connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".

16. A noncumbustible sign legibly printed in not less than 12.7 mm (1/2 in.) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

#### WARNING

SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

DATED at Toronto this 7 day in the month of DECEMBER in the year 1988 for authorization #88-2-109 on behalf of:

**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

# AUTHORIZATION BY THE BUILDING MATERIALS EVALUATION COMMISSION

#88-1-108 7 December 1988

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

MacMillan Bloedel Ltd. 1272 Derwent Way Annacis Island, B.C. V3M 5R1

#### ON THE SUBJECT OF:

"Parallam" parallel strand lumber (PSL) is manufacturered by laminating long stands of Douglas fir with an exterior-type adhesive (phenol formaldehyde). The strands are oriented to the length of the member and then compressed under heat and pressure to the desired lay-up pattern to form a continuous billet. The billet may then be cross cut to any length.

- Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
- 2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
- 3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

- 4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
- 5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

- 6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O 1980, Ontario Regulation 419/86 as amended shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.
- 7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.
- 8. This AUTHORIZATION is subject to the terms and conditions of a current valid C.M.H.C. Building Materials Evaluation Report. Any conflict between the Ontario Regulations, C.M.H.C. Report or this AUTHORIZATION the most restricted matter shall apply.
- 9. The subject matter shall conform to the manufacturer's published installation instructions and shall be designed, engineered, inspected and verified for each project by the architect or engineer (authorized in Ontario). All related documents and drawings shall bear the professional seal and signature of the architect or engineer skilled in wood design.

DATED at Toronto this 7 day in the month of because in the year 1988 for authorization #88-1-108 on behalf of:



**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

AMENDED AUTHORIZATION BY THE AMENDED #87-10-107 7 December 1988

BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF the Applicant:

Haven-Busch Company 3443 Chicago Drive S. West Grandville, U.S.A. MI 49418

## Agent:

Canfab Steel Inc. 4380 South Service Rd., Unit 15 Burlington, Ontario L7L 5Y6

#### ON THE SUBJECT OF:

Cirkel-Line Entrances, these are electrically powered large diameter revolving doors with four hinged door leaves attached to the rotating centre core. Interior and exterior non-touching sensors provide rotation speeds and start/stop to suit the occupant of these revolving doors.

- 1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
- 2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

- 3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
- 4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
- 5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

- 6. Except as authorized herein all applicable requirements of the Ontario Building Code Act and Ontario Regulation 419/86 shall be met. A copy of this Authorization shall be kept and maintained on the site of construction.
- 7. The electrically powered revolving doors shall be exempt from the code requirements of having hinged doors providing equivalent units of exit width located adjacent to them and may be used as an exit serving any and all floors, also the single leaves of this multiple leaf door may exceed the maximum width of the code.
- 8. The electrically powered revolving doors shall be considered to provide a minimum standard for clear passageway throughout each door leaf of at least;
  - (a) 550 mm (21.65 in.) for one unit of exit width,
  - (b) 850 mm (33.46 in.) for one and one half units of exit width,
  - (c) 1100 mm (43.30 in.) for two units of exit width, and
  - (d) the total units of exit width for each electrically powered revolving door is the accumulation of the exit widths on both sides of the centre core, provided that the aggregate door leaf widths do not exceed the narrowest throat (entrance) opening.

3/...

- 9. The four door leaves shall be operable to allow each door leaf to swing wide open when a force of not more than 90N (20 lb.) is applied to the centre of the door leaf in either direction of egress travel. There shall not be any latching or locking devices installed to impede or prevent exiting, however entrance may be permitted through the use of a key or access card and an emergency release mechanism shall be installed.
- 10. A legible sign having the words PUSH FOR EMERGENCY EXIT shall be permanently mounted mid-high on each side of the door leaf, the lettering on the sign shall be at least 25 mm (1 in.) high with a 5 mm (1/4 in.) stroke.
- 11. Each door leaf shall be so equipped with non-touching sensors to shut off the electrical supply to the revolving core to:
  - (a) fail safe should a person stop or fall inside the entrance, or encounter any obstacle by the door leaf, and
  - (b) each door leaf shall be capable of folding open in the forward or backward direction.
- 12. The maximum rotation speeds of the leading edge of the door leaf for normal use shall be 250 feet per minute and for the handicap use shall be 125 feet per minute. Both rotational speeds shall be adjustable to suit the particular needs of the installation.
- 13. A push button with a handicap symbol shall be installed at or near the interior and the exterior of the building for each electrically powered revolving door to reduce the core speed by at least one-half the normal speed for at least one revolution.
- 14. All glass used in each door leaf and the enclosure walls shall comply with the building code for exits and conform to CAN2-12.1, "Glass, Safety, Tempered or Laminated" or to CAN2-12.11, "Glass, Wired, Safety".
- 15. Specially trained installers shall install, trial run, instruct and supply the user on operation, maintenance and trouble shooting functions of the unit.

DATED at Toronto this 7 day in the month of because in the year 1988 for authorization #87-10-107 amended on behalf of:





**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

# AUTHORIZATION BY THE BUILDING MATERIALS EVALUATION COMMISSION

# 87-8-105 14 July 1988

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF the Applicant:

Vinyl Council of Canada 1262 Don Mills Road Don Mills, Ontario M3B 2W7

# Agents:

Listed manufacturers by the Applicant to date of this Authorization are:

BPCO Inc.
Daymond Limited
Duchesne & Fils Ltee.
Mastic Inc.
Mitten Vinyl Inc.
Sauder Industries Ltd.
Vycan Building Products.

And see paragraph 9 (a)(b).

#### ON THE SUBJECT OF:

Vinyl/Gypsum System, this is the use of combustible vinyl cladding over sheathing paper and gypsum board sheathing applied to the exterior of a building as an integral cladding system in lieu of noncombustible cladding within limitation.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

- 2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
- 3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
- 4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
- 5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

- 6. The gypsum shall be as per Code requirements for exterior grade gypsum board sheathing with a minimum of 12.7 mm (1/2 in.) thickness, fastening to the building structure shall be as per Code requirements.
- 7. Sheathing paper shall be as per Code requirements.
- 8. The Vinyl cladding shall conform to the requirements of CGSB 41-GP-24 Ma, fastening to the building structure shall be as per Code requirements.
- 9. (a) Each manufacturer to date of this authorization has tested their vinyl cladding for a Flame Spread Rating of not more than 25 using the CAN-4-S102.2-M83 "Standard Method of Test for Surface Burning Characteristics of Flooring and Miscellaneous Materials and Assemblies" and
  - (b) manufacturers listed after the date of this authorization shall test in conformance to the above paragraph 9.(a).

- 10. Vinyl/Gypsum System is acceptable in Part 9 of the Building Code where noncombustible cladding is required:
  - a) in buildings containing dwelling units only where there is no dwelling unit above another dwelling unit, or
  - b) in all other buildings where the limiting distance is not less than .6 m (2 ft.)
- 11. a) Vinyl/Gypsum System shall be allowed as a combustible element in noncombustible construction as cladding where an occupancy classification is such as to permit an exposing building face to have unprotected openings of greater than 25 per cent in Part 3 of the Building Code.
  - b) The requirements of the Building Code with respect to limiting distance shall apply to all installations under the authorization.
- 12. a) Unprotected openings, limiting distance and exposing building face shall be as defined by the Building Code.
  - b) Each installation shall conform to the manufacturer's installation instructions and shall be installed by the manufacturer's listed trained personnel.

DATED at Toronto this 14 day in the month of JULY in the year 1988 for authorization #87-8-105 on behalf of:



**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

## AMENDED AUTHORIZATION BY THE

#86-7-97 14 July 1988

# BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Preswitt Manufacturing Ltd. 2040 West 12th Avenue Vancouver, British Columbia V6J 2G2

ON THE SUBJECT OF EXTERIOR PROTECTIVE CLADDING SYSTEM:

The exterior protective cladding system shall be fastened to the exterior supporting wall assembly and shall consist of an open weave glass fibre fabric, embedded in a copolymer based synthetic or polymer based cementacious ground coat and finished with a synthetic ready mixed acrylic based texture wall coating for the exterior of a building wall finish.

- 1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
- The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
- 3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

- 4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
- 5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

- 6. This exterior protective cladding system is permitted to be used on buildings required to be of noncombustible construction.
- 7. The exterior protective cladding system shall not be included in the construction of an exposing building face except where unprotected openings greater than 25 per cent are permitted.
- 8. (a) The flame spread rating and the manufacturer's name shall be clearly marked on the insulation.
  - (b) No additives such as rapid binders, anti freeze, accelerators, etc. shall be added to any component.
- 9. The exterior protective cladding system shall cover all the exposed surfaces of the insulation and shall remain in place for at least 15 minutes when tested in conformance wih CAN4-S101-M82.
- 10. Each installation shall conform to the manufacturer's engineering and installation instructions and shall be reviewed in detail, stamped and signed for construction as specified by the manufacturer's listed trained personnel. Identification cards for installers shall be issued only to qualified trained personnel listed by the manufacturer.
- 11. (a) To confirm the validity of this AUTHORIZATION on ANY building the applicant and/or the manufacturer shall allow entry to the office, processing plant and warehouse by any related agencies; in order to conduct inventory audits and take away samples of the subject matter and/or their products of production and/or those in storage.

- (b) The applicant and/or the manufacturer shall engage an independent test agency who is listed by Standards Council of Canada as an Accredited Testing Organization to insure the flame spread of the insulation meets the requirements of the Building Code in all future manufacturing and installations.
- (c) In the event of any discrepancy in product quality which may necessitate a product re-call the applicant and/or the manufacturer must immediately notify by registered mail all those related agencies and the applicable Municipalities and the Building Materials Evaluation Commission.
- 12. When the wall assembly is subjected to a fire exposure in conformance with paragraph 12.2;
  - (a) the heat flux measured 3.5 m above the opening is not greater than 50  $kW/m^2$ , and
  - (b) the flaming on or in the wall assembly does not spread more than 5.0 m above the opening during or following the first 25 min. flame exposure.
  - 2. The fire exposure in para 12.1 shall be such that:
    - (a) the wall assembly is exposed on the exterior face to a flame issuing from an opening in the assembly,
    - (b) the test assembly is not less than 5 m wide and not less than 10 m high with an opening having dimensions 1.4 0.1 m high and 2.5. 0.1 m wide located in the middle of the assembly within 3 m of the bottom edge,
    - (c) the assembly is representative of the exterior wall construction, except for the interior finish, and incorporates horizontal and vertical joints within 3 m vertically above the opening,
    - (d) the flame issuing from the opening generates an average heat flux of 45  $3 \text{ kW/m}^2$  measured 0.5 m above the opening and 27  $2 \text{ kW/m}^2$  measured 1.5 m above the opening on a noncombustible wall having a density of at least 700 kg/m $^3$  to a depth of 12 mm from the external surface, and

(e) the duration of the flame exposure is at least 15 minutes at the heat fluxes specified in Clause (d) with a 5 minute gradual heat flux buildup period at the beginning of the test and a 5 minute gradual cooldown period at the end of the flame exposure.

DATED at Toronto this  $14^{74}$  day in the month of JULY in the year 1988 for authorization #86-7-97 on behalf of:



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

AMENDED AUTHORIZATION BY THE AMENDED #86-6-96 14 July 1988

BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Double A/D Distributors Ltd. 420 Tapscott Road Scarborough, Ontario M1B 1Y4

ON THE SUBJECT OF EXTERIOR PROTECTIVE CLADDING SYSTEM:

The exterior protective cladding system shall be fastened to the exterior supporting wall assembly and shall consist of an open weave glass fibre fabric, embedded in a copolymer based synthetic or polymer based cementacious ground coat and finished with a synthetic ready mixed acrylic based texture wall coating for the exterior of a building wall finish.

- 1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
- The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
- 3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

- 4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
- 5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

- 6. This exterior protective cladding system is permitted to be used on buildings required to be of noncombustible construction.
- 7. The exterior protective cladding system shall not be included in the construction of an exposing building face except where unprotected openings greater than 25 per cent are permitted.
- 8. (a) The flame spread rating and the manufacturer's name shall be clearly marked on the insulation.
  - (b) No additives such as rapid binders, anti freeze, accelerators, etc. shall be added to any component.
- 9. The exterior protective cladding system shall cover all the exposed surfaces of the insulation and shall remain in place for at least 15 minutes when tested in conformance wih CAN4-S101-M82.
- 10. Each installation shall conform to the manufacturer's engineering and installation instructions and shall be reviewed in detail, stamped and signed for construction as specified by the manufacturer's listed trained personnel. Identification cards for installers shall be issued only to qualified trained personnel listed by the manufacturer.
- 11. (a) To confirm the validity of this AUTHORIZATION on ANY building the applicant and/or the manufacturer shall allow entry to the office, processing plant and warehouse by any related agencies; in order to conduct inventory audits and take away samples of the subject matter and/or their products of production and/or those in storage.

- (b) The applicant and/or the manufacturer shall engage an independent test agency who is listed by Standards Council of Canada as an Accredited Testing Organization to insure the flame spread of the insulation meets the requirements of the Building Code in all future manufacturing and installations.
- (c) In the event of any discrepancy in product quality which may necessitate a product re-call the applicant and/or the manufacturer must immediately notify by registered mail all those related agencies and the applicable Municipalities and the Building Materials Evaluation Commission.
- 12. When the wall assembly is subjected to a fire exposure in conformance with paragraph 12.2;
  - (a) the heat flux measured 3.5 m above the opening is not greater than 50  $kW/m^2$ , and
  - (b) the flaming on or in the wall assembly does not spread more than 5.0 m above the opening during or following the first 25 min. flame exposure.
  - 2. The fire exposure in para 12.1 shall be such that:
    - (a) the wall assembly is exposed on the exterior face to a flame issuing from an opening in the assembly,
    - (b) the test assembly is not less than 5 m wide and not less than 10 m high with an opening having dimensions 1.4 0.1 m high and 2.5. 0.1 m wide located in the middle of the assembly within 3 m of the bottom edge,
    - (c) the assembly is representative of the exterior wall construction, except for the interior finish, and incorporates horizontal and vertical joints within 3 m vertically above the opening,
    - (d) the flame issuing from the opening generates an average heat flux of 45  $3 \text{ kW/m}^2$  measured 0.5 m above the opening and 27  $2 \text{ kW/m}^2$  measured 1.5 m above the opening on a noncombustible wall having a density of at least 700 kg/m $^3$  to a depth of 12 mm from the external surface, and

(e) the duration of the flame exposure is at least 15 minutes at the heat fluxes specified in Clause (d) with a 5 minute gradual heat flux buildup period at the beginning of the test and a 5 minute gradual cooldown period at the end of the flame exposure.

DATED at Toronto this 14 day in the month of JULY in the year 1988 for authorization #86-6-96 on behalf of:

**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

AMENDED AUTHORIZATION BY THE AMENDED #86-1-91 14 July 1988

#### BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Legerlite Plastics Inc. Ispro Coatings Inc. 805 Selkirk Pointe Claire, Quebec H9R 3S2

ON THE SUBJECT OF EXTERIOR PROTECTIVE CLADDING SYSTEM:

The exterior protective cladding system shall be fastened to the exterior supporting wall assembly and shall consist of an open weave glass fibre fabric, embedded in a copolymer based synthetic or polymer based cementacious ground coat and finished with a synthetic ready mixed acrylic based texture wall coating for the exterior of a building wall finish.

- 1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
- 2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
- 3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

- 4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
- 5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

- 6. This exterior protective cladding system is permitted to be used on buildings required to be of noncombustible construction.
- 7. The exterior protective cladding system shall not be included in the construction of an exposing building face except where unprotected openings greater than 25 per cent are permitted.
- 8. (a) The flame spread rating and the manufacturer's name shall be clearly marked on the insulation.
  - (b) No additives such as rapid binders, anti freeze, accelerators, etc. shall be added to any component.
- 9. The exterior protective cladding system shall cover all the exposed surfaces of the insulation and shall remain in place for at least 15 minutes when tested in conformance wih CAN4-S101-M82.
- 10. Each installation shall conform to the manufacturer's engineering and installation instructions and shall be reviewed in detail, stamped and signed for construction as specified by the manufacturer's listed trained personnel. Identification cards for installers shall be issued only to qualified trained personnel listed by the manufacturer.
- 11. (a) To confirm the validity of this AUTHORIZATION on ANY building the applicant and/or the manufacturer shall allow entry to the office, processing plant and warehouse by any related agencies; in order to conduct inventory audits and take away samples of the subject matter and/or their products of production and/or those in storage.

- (b) The applicant and/or the manufacturer shall engage an independent test agency who is listed by Standards Council of Canada as an Accredited Testing Organization to insure the flame spread of the insulation meets the requirements of the Building Code in all future manufacturing and installations.
- (c) In the event of any discrepancy in product quality which may necessitate a product re-call the applicant and/or the manufacturer must immediately notify by registered mail all those related agencies and the applicable Municipalities and the Building Materials Evaluation Commission.
- 12. 1. When the wall assembly is subjected to a fire exposure in conformance with paragraph 12.2;
  - (a) the heat flux measured 3.5 m above the opening is not greater than 50  $kW/m^2$ , and
  - (b) the flaming on or in the wall assembly does not spread more than 5.0 m above the opening during or following the first 25 min. flame exposure.
  - 2. The fire exposure in para 12.1 shall be such that:
    - (a) the wall assembly is exposed on the exterior face to a flame issuing from an opening in the assembly,
    - (b) the test assembly is not less than 5 m wide and not less than 10 m high with an opening having dimensions 1.4 0.1 m high and 2.5. 0.1 m wide located in the middle of the assembly within 3 m of the bottom edge,
    - (c) the assembly is representative of the exterior wall construction, except for the interior finish, and incorporates horizontal and vertical joints within 3 m vertically above the opening,
    - (d) the flame issuing from the opening generates an average heat flux of 45  $3 \text{ kW/m}^2$  measured 0.5 m above the opening and 27  $2 \text{ kW/m}^2$  measured 1.5 m above the opening on a noncombustible wall having a density of at least 700 kg/m $^3$  to a depth of 12 mm from the external surface, and

(e) the duration of the flame exposure is at least 15 minutes at the heat fluxes specified in Clause (d) with a 5 minute gradual heat flux buildup period at the beginning of the test and a 5 minute gradual cooldown period at the end of the flame exposure.

DATED at Toronto this 14th day in the month of JULY in the year 1988 for authorization #86-1-91 on behalf of:



**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

AMENDED AUTHORIZATION BY THE AMENDED #85-10-88 14 July 1988

# BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Dryvit Outsulation System Ltd. 100 West Beaver Creek Dr., Unit 12 Richmond Hill, Ontario L4B 1C2

ON THE SUBJECT OF EXTERIOR PROTECTIVE CLADDING SYSTEM:

The exterior protective cladding system shall be fastened to the exterior supporting wall assembly and shall consist of an open weave glass fibre fabric, embedded in a copolymer based synthetic or polymer based cementacious ground coat and finished with a synthetic ready mixed acrylic based texture wall coating for the exterior of a building wall finish.

- 1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
- 2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
- 3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

- 4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
- 5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

- 6. This exterior protective cladding system is permitted to be used on buildings required to be of noncombustible construction.
- 7. The exterior protective cladding system shall not be included in the construction of an exposing building face except where unprotected openings greater than 25 per cent are permitted.
- 8. (a) The flame spread rating and the manufacturer's name shall be clearly marked on the insulation.
  - (b) No additives such as rapid binders, anti freeze, accelerators, etc. shall be added to any component.
- 9. The exterior protective cladding system shall cover all the exposed surfaces of the insulation and shall remain in place for at least 15 minutes when tested in conformance wih CAN4-S101-M82.
- 10. Each installation shall conform to the manufacturer's engineering and installation instructions and shall be reviewed in detail, stamped and signed for construction as specified by the manufacturer's listed trained personnel. Identification cards for installers shall be issued only to qualified trained personnel listed by the manufacturer.
- 11. (a) To confirm the validity of this AUTHORIZATION on ANY building the applicant and/or the manufacturer shall allow entry to the office, processing plant and warehouse by any related agencies; in order to conduct inventory audits and take away samples of the subject matter and/or their products of production and/or those in storage.

- (b) The applicant and/or the manufacturer shall engage an independent test agency who is listed by Standards Council of Canada as an Accredited Testing Organization to insure the flame spread of the insulation meets the requirements of the Building Code in all future manufacturing and installations.
- (c) In the event of any discrepancy in product quality which may necessitate a product re-call the applicant and/or the manufacturer must immediately notify by registered mail all those related agencies and the applicable Municipalities and the Building Materials Evaluation Commission.
- 12. When the wall assembly is subjected to a fire exposure in conformance with paragraph 12.2;
  - (a) the heat flux measured 3.5 m above the opening is not greater than 50  $kW/m^2$ , and
  - (b) the flaming on or in the wall assembly does not spread more than 5.0 m above the opening during or following the first 25 min. flame exposure.
  - 2. The fire exposure in para 12.1 shall be such that:
    - (a) the wall assembly is exposed on the exterior face to a flame issuing from an opening in the assembly,
    - (b) the test assembly is not less than 5 m wide and not less than 10 m high with an opening having dimensions 1.4 0.1 m high and 2.5. 0.1 m wide located in the middle of the assembly within 3 m of the bottom edge,
    - (c) the assembly is representative of the exterior wall construction, except for the interior finish, and incorporates horizontal and vertical joints within 3 m vertically above the opening,
    - (d) the flame issuing from the opening generates an average heat flux of 45  $3 \text{ kW/m}^2$  measured 0.5 m above the opening and 27  $2 \text{ kW/m}^2$  measured 1.5 m above the opening on a noncombustible wall having a density of at least 700 kg/m $^3$  to a depth of 12 mm from the external surface, and

(e) the duration of the flame exposure is at least 15 minutes at the heat fluxes specified in Clause (d) with a 5 minute gradual heat flux buildup period at the beginning of the test and a 5 minute gradual cooldown period at the end of the flame exposure.

DATED at Toronto this 14th day in the month of JULY in the year 1988 for authorization #85-10-88 on behalf of:



**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

# AMENDED AUTHORIZATION BY THE

AMENDED #85-9-87 14 July 1988

# BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

STO Industries Inc.
Shipp Centre
3300 Bloor Street West
Suite 3100
Toronto, Ontario
M8X 2X3

ON THE SUBJECT OF EXTERIOR PROTECTIVE CLADDING SYSTEM:

The exterior protective cladding system shall be fastened to the exterior supporting wall assembly and shall consist of an open weave glass fibre fabric, embedded in a copolymer based synthetic or polymer based cementacious ground coat and finished with a synthetic ready mixed acrylic based texture wall coating for the exterior of a building wall finish.

- 1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
- 2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
- 3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

- 4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
- 5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

- 6. This exterior protective cladding system is permitted to be used on buildings required to be of noncombustible construction.
- 7. The exterior protective cladding system shall not be included in the construction of an exposing building face except where unprotected openings greater than 25 per cent are permitted.
- 8. (a) The flame spread rating and the manufacturer's name shall be clearly marked on the insulation.
  - (b) No additives such as rapid binders, anti freeze, accelerators, etc. shall be added to any component.
- 9. The exterior protective cladding system shall cover all the exposed surfaces of the insulation and shall remain in place for at least 15 minutes when tested in conformance wih CAN4-S101-M82.
- 10. Each installation shall conform to the manufacturer's engineering and installation instructions and shall be reviewed in detail, stamped and signed for construction as specified by the manufacturer's listed trained personnel. Identification cards for installers shall be issued only to qualified trained personnel listed by the manufacturer.
- 11. (a) To confirm the validity of this AUTHORIZATION on ANY building the applicant and/or the manufacturer shall allow entry to the office, processing plant and warehouse by any related agencies; in order to conduct inventory audits and take away samples of the subject matter and/or their products of production and/or those in storage.

- (b) The applicant and/or the manufacturer shall engage an independent test agency who is listed by Standards Council of Canada as an Accredited Testing Organization to insure the flame spread of the insulation meets the requirements of the Building Code in all future manufacturing and installations.
- (c) In the event of any discrepancy in product quality which may necessitate a product re-call the applicant and/or the manufacturer must immediately notify by registered mail all those related agencies and the applicable Municipalities and the Building Materials Evaluation Commission.
- 12. When the wall assembly is subjected to a fire exposure in conformance with paragraph 12.2;
  - (a) the heat flux measured 3.5 m above the opening is not greater than 50  $kW/m^2$ , and
  - (b) the flaming on or in the wall assembly does not spread more than 5.0 m above the opening during or following the first 25 min. flame exposure.
  - 2. The fire exposure in para 12.1 shall be such that:
    - (a) the wall assembly is exposed on the exterior face to a flame issuing from an opening in the assembly,
    - (b) the test assembly is not less than 5 m wide and not less than 10 m high with an opening having dimensions 1.4 0.1 m high and 2.5. 0.1 m wide located in the middle of the assembly within 3 m of the bottom edge,
    - (c) the assembly is representative of the exterior wall construction, except for the interior finish, and incorporates horizontal and vertical joints within 3 m vertically above the opening,
    - (d) the flame issuing from the opening generates an average heat flux of 45 3 kW/m² measured 0.5 m above the opening and 27 2 kW/m² measured 1.5 m above the opening on a noncombustible wall having a density of at least 700 kg/m³ to a depth of 12 mm from the external surface, and

(e) the duration of the flame exposure is at least 15 minutes at the heat fluxes specified in Clause (d) with a 5 minute gradual heat flux buildup period at the beginning of the test and a 5 minute gradual cooldown period at the end of the flame exposure.

DATED at Toronto this 14<sup>TH</sup> day in the month of JULY in the year 1988 for authorization #85-9-87 on behalf of:



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

# AMENDED AUTHORIZATION BY THE BUILDING MATERIALS EVALUATION COMMISSION

AMENDED #85-8-86 14 July 1988

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Dow Chemical Canada Inc. 3035 Orlands Drive Mississauga, Ontario L4V 1L6

ON THE SUBJECT OF EXTERIOR PROTECTIVE CLADDING SYSTEM:

The exterior protective cladding system shall be fastened to the exterior supporting wall assembly and shall consist of an open weave glass fibre fabric, embedded in a copolymer based synthetic or polymer based cementacious ground coat and finished with a synthetic ready mixed acrylic based texture wall coating for the exterior of a building wall finish.

- 1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
- The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
- 3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

- 4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
- 5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

- 6. This exterior protective cladding system is permitted to be used on buildings required to be of noncombustible construction.
- 7. The exterior protective cladding system shall not be included in the construction of an exposing building face except where unprotected openings greater than 25 per cent are permitted.
- 8. (a) The flame spread rating and the manufacturer's name shall be clearly marked on the insulation.
  - (b) No additives such as rapid binders, anti freeze, accelerators, etc. shall be added to any component.
- 9. The exterior protective cladding system shall cover all the exposed surfaces of the insulation and shall remain in place for at least 15 minutes when tested in conformance wih CAN4-S101-M82.
- 10. Each installation shall conform to the manufacturer's engineering and installation instructions and shall be reviewed in detail, stamped and signed for construction as specified by the manufacturer's listed trained personnel. Identification cards for installers shall be issued only to qualified trained personnel listed by the manufacturer.
- 11. (a) To confirm the validity of this AUTHORIZATION on ANY building the applicant and/or the manufacturer shall allow entry to the office, processing plant and warehouse by any related agencies; in order to conduct inventory audits and take away samples of the subject matter and/or their products of production and/or those in storage.

- (b) The applicant and/or the manufacturer shall engage an independent test agency who is listed by Standards Council of Canada as an Accredited Testing Organization to insure the flame spread of the insulation meets the requirements of the Building Code in all future manufacturing and installations.
- (c) In the event of any discrepancy in product quality which may necessitate a product re-call the applicant and/or the manufacturer must immediately notify by registered mail all those related agencies and the applicable Municipalities and the Building Materials Evaluation Commission.
- 12. When the wall assembly is subjected to a fire exposure in conformance with paragraph 12.2;
  - (a) the heat flux measured 3.5 m above the opening is not greater than 50  $kW/m^2$ , and
  - (b) the flaming on or in the wall assembly does not spread more than 5.0 m above the opening during or following the first 25 min. flame exposure.
  - 2. The fire exposure in para 12.1 shall be such that:
    - (a) the wall assembly is exposed on the exterior face to a flame issuing from an opening in the assembly,
    - (b) the test assembly is not less than 5 m wide and not less than 10 m high with an opening having dimensions 1.4 0.1 m high and 2.5. 0.1 m wide located in the middle of the assembly within 3 m of the bottom edge,
    - (c) the assembly is representative of the exterior wall construction, except for the interior finish, and incorporates horizontal and vertical joints within 3 m vertically above the opening,
    - (d) the flame issuing from the opening generates an average heat flux of 45  $3 \text{ kW/m}^2$  measured 0.5 m above the opening and 27  $2 \text{ kW/m}^2$  measured 1.5 m above the opening on a noncombustible wall having a density of at least 700 kg/m $^3$  to a depth of 12 mm from the external surface, and

(e) the duration of the flame exposure is at least 15 minutes at the heat fluxes specified in Clause (d) with a 5 minute gradual heat flux buildup period at the beginning of the test and a 5 minute gradual cooldown period at the end of the flame exposure.

DATED at Toronto this 14<sup>TM</sup> day in the month of JULY in the year 1388 for authorization #85-8-86 on behalf of:

**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

# AMENDED AUTHORIZATION BY THE BUILDING MATERIALS EVALUATION COMMISSION

AMENDED #85-7-85 7 December 1988

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Rolf Jensen & Associates Limited 4100 Yonge Street Willowdale, Ontario M2P 2B5

ON THE SUBJECT OF:

A window sprinkler assembly system to provide a two-hour fire resistance rated separation in a wall to consist of tempered or heat strengthened glass fixed in a non openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with guick response action.

- 1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
- 2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
- 3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

- 4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
- 5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

- 6. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer (authorized in Ontario) and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).
- 7. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.
- 8. The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited model FR-1/Q-60, 12.7 mm (1/2 in.) orifice,  $74^{\circ}\text{C}$  ( $165^{\circ}\text{F}$ ) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council Canada.
- 9. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness or extruded aluminum 1.8 mm (1/16 in.) minimum thickness. The maximum glazing shall be 2134 mm (7 ft. 0 in.) wide by 2844 mm (9 ft. 4 in.) high and minimum 6 mm (1/4 in.) thick.

- 10. This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non openable window openings to a maximum of 2 hr. fire resistance rating provided,
  - (a) in an exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or
  - (b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.
- 11. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.
- 12. This window sprinkler system shall not be used in exits as defined in the Ontario Building Code.
- 13. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.
- 14. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunicator panel.
- 15. Where the water supply is from a standpipe system conforming to the Code, the siamese connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".

16. A noncumbustible sign legibly printed in not less than 12.7 mm (1/2 in.) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

#### WARNING

SPECIAL SPRINKLER HEADS ON THIS SYSTEM
ARE AN INTEGRAL PART OF WINDOW FIRE
SEPARATION. THIS WATER SUPPLY MAY
ONLY BE SHUT OFF AFTER ALL THE PROPER
AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

DATED at Toronto this 7 day in the month of becember in the year 1988 for authorization #85-7-85 amended on behalf of:

**Building Materials Evaluation Commission** 



This is a summary of the decision or authorization.

Further information may be obtained by writing to the Commission Secretary, 777 Bay St., Toronto, Ont. M5G 2E5

## AMENDED AUTHORIZATION BY THE

AMENDED #82-10-48 12 AUGUST 1987

## BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 18(4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF the Applicant:

Kilmer Environmental Inc.
208 Britannia Road East, Unit #1
Mississauga, Ontario
L4Z 1S6

#### AGENT:

McCarthy Robinson Inc. 321 Progress Avenue Scarborough, Ontario MlP 277

#### ON THE SUBJECT OF:

The use of Kitchen Exhaust, Heat Recovery by means of a washable plate type heat exchanger or heat coil.

- 1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
- 2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

- 3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
- 4. This AUTHORIZATION is not transferrable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision of change by the COMMISSION.
- 5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for reevaluation by the COMMISSION.

- 6. The tempered supply return air duct system shall be for the kitchen area only with a fire damper at the reclaim unit and the air duct beyond shall be installed in accordance with the Ontario Building Code 6.2.4.
- 7. Installation and maintenance shall comply with the Application and submitted data dated 10 August 1982 entitled Specification Sheets for Indusco Kitchen Heat Reclaim System including Typical drawing for Coil or Plate Heat Exchanger.
- 8. Except as noted above the entire system shall conform to N.F.P.A. 96.
- 9. Where any reference to date has been made by the APPLICANT or the COMMISSION on any submission or authorization to the N.F.P.A. 96 regardless of the date it shall read as of the date proclaimed for current amendments to the Ontario Building code.

DATED at Toronto this 12<sup>74</sup> day in the month of August in the year 1987 for authorization #82-10-48 amended on behalf of: